

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: February 10, 2005, 05:40:01 ; Search time 93.2497 Seconds  
(without alignments)  
3520.040 Million cell updates/sec

Title: US-10-617-619A-8  
Perfect score: 3464  
Sequence: 1 ANAFLLXLRGSLRXCKXX.....MHEALHHYTKSLSPGK 641

Scoring table: BLOSUM62DX

Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : UniProt\_03:\*

1: uniprot\_sprot:\*

2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3458	99.8	679	2 Q96P08	Q96P08 homo sapien
2	2187	63.1	466	1 FA7_HUMAN	P08709 homo sapien
3	1654.5	47.8	444	1 FA7_RABIT	P98139 oryctolagus
4	1587.5	45.8	446	1 FA7_MOUSE	P70375 mus musculus
5	1586	45.8	407	1 FA7_BOVIN	P22457 bos taurus
6	1541	44.5	446	1 FA7_RAT	Q8K306 rattus norv
7	1272.5	36.7	482	2 Q7Z351	Q7Z351 homo sapien
8	1271	36.7	473	2 Q6P055	Q6P055 homo sapien
9	1270.5	36.7	469	2 Q7Z7P5	Q7Z7P5 homo sapien
10	1269.5	36.6	465	2 Q6GMX6	Q6GMX6 homo sapien
11	1265	36.5	330	1 GCL_HUMAN	P01857 homo sapien
12	1265	36.5	470	2 Q6PJA4	Q6PJA4 homo sapien
13	1265	36.5	470	2 Q7Z5W1	Q7Z5W1 homo sapien
14	1265	36.5	475	2 Q6GMW7	Q6GMW7 homo sapien
15	1265	36.5	476	2 Q6GMX1	Q6GMX1 homo sapien
16	1264	36.5	466	2 Q6IN78	Q6IN78 homo sapien
17	1264	36.5	472	2 Q6N089	Q6N089 homo sapien
18	1264	36.5	473	2 Q6MZV7	Q6MZV7 homo sapien
19	1263.5	36.5	544	2 Q6PJ95	Q6PJ95 homo sapien
20	1261.5	36.4	478	2 Q6P181	Q6P181 homo sapien
21	1261	36.4	475	2 Q6MZQ6	Q6MZQ6 homo sapien
22	1261	36.4	480	2 Q6N094	Q6N094 homo sapien
23	1261	36.4	481	2 Q6N097	Q6N097 homo sapien
24	1259.5	36.4	466	2 Q6N096	Q6N096 homo sapien
25	1258	36.3	348	2 Q6PYX1	Q6PYX1 homo sapien
26	1258	36.3	480	2 Q6PJF1	Q6PJF1 homo sapien
27	1254.5	36.2	487	2 Q652L2	Q652L2 mus sp.fv/
28	1254	36.2	475	2 Q6N095	Q6N095 homo sapien
29	1185.5	34.2	518	2 Q6N030	Q6N030 homo sapien
30	1184	34.2	354	2 Q86TT2	Q86TT2 homo sapien
31	1181.5	34.1	521	2 Q8N4Y9	Q8N4Y9 homo sapien

32	1174.5	33.9	425	2 Q804X7	Q804X7 gallus gall
33	1169	33.7	509	2 Q8NF17	Q8NF17 homo sapien
34	1164.5	33.6	432	2 Q6GNA2	Q6GNA2 xenopus lae
35	1164	33.6	290	1 GC3_HUMAN	P01860 homo sapien
36	1157.5	33.4	417	2 Q6N093	Q6N093 homo sapien
37	1151	33.2	465	2 Q6P6C4	Q6P6C4 homo sapien
38	1150	33.2	326	1 GC2_HUMAN	P01859 homo sapien
39	1146	33.1	464	2 Q6MZU6	Q6MZU6 homo sapien
40	1144	33.0	473	2 Q8TC63	Q8TC63 homo sapien
41	1142.5	33.0	327	1 GC4_HUMAN	P01861 homo sapien
42	1138	32.9	493	2 Q68CN4	Q68CN4 homo sapien
43	1137	32.8	476	2 Q6MZX7	Q6MZX7 homo sapien
44	933.5	26.9	433	2 Q90YK1	Q90YK1 brachydanio
45	929	26.8	323	1 GC_RABIT	P01870 oryctolagus

ALIGNMENTS

RESULT 1  
Q96P08 PRELIMINARY; PRT; 679 AA.  
AC Q96P08;  
DT 01-DEC-2001 (TrEMBLrel. 19, Created)  
DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)  
DE Factor VII active site mutant immunconjugate.  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=21477448; PubMed=11593034; DOI=10.1073/pnas.201420298;  
RA Hu Z., Garen A.;  
RT "Targeting tissue factor on tumor vascular endothelial cells and tumor  
cells for immunotherapy in mouse models of prostatic cancer.";  
Proc. Natl. Acad. Sci. U.S.A. 98:12180-12185(2001).  
RN [2]  
RP SEQUENCE FROM N.A.  
RA Hu Z., Garen A.;  
RL Submitted (FEB-2003) to the EMBL/GenBank/DBJ databases.  
DR EMBL; AF272774; AAK58686.2; -;  
DR HSSP; P08709; IKLI.  
DR GO; GO:0005576; C:extracellular; IEA.  
DR GO; GO:0005509; F:calcium ion binding; IEA.  
DR GO; GO:0008233; F:peptidase activity; IEA.  
DR GO; GO:0004295; F:trypsin activity; IEA.  
DR GO; GO:0006508; P:proteolysis and peptidolysis; IEA.  
DR InterPro; IPR001152; Asx hydroxyl\_S.  
DR InterPro; IPR000742; EGF-2.  
DR InterPro; IPR001881; EGF\_Ca.  
DR InterPro; IPR006209; EGF-like.  
DR InterPro; IPR007110; Ig-like.  
DR InterPro; IPR003597; Ig cl.  
DR InterPro; IPR003006; Ig MHC.  
DR InterPro; IPR001254; Peptidase S1.  
DR InterPro; IPR009003; Pept\_Ser\_Cys.  
DR InterPro; IPR000294; VitK\_dep\_GLA.  
DR Pfam; PF07654; C1-set; 2.  
DR Pfam; PF00008; EGF; 1.  
DR Pfam; PF00594; Gla; 1.  
DR Pfam; PF00089; Trypsin; 1.  
DR SMART; SM00179; EGF\_CA; 1.  
DR SMART; SM00069; GLA; 1.  
DR SMART; SM00407; IGcl; 1.  
DR SMART; SM00020; Tryp\_SPC; 1.  
DR PROSITE; PS00010; ASX HYDROXYL; UNKNOWN\_1.  
DR PROSITE; PS00022; EGF\_1; UNKNOWN\_1.  
DR PROSITE; PS01186; EGF\_2; 1.  
DR PROSITE; PS00026; EGF\_3; 1.  
DR PROSITE; PS01187; EGF\_CA; 1.  
DR PROSITE; PS00011; GLA\_1; 1.



RX MEDLINE=98367502; PubMed=9692950; DOI=10.1021/bi980522f;  
RA Muranyi A., Finn B.E., Gippert G.P., Forsen S., Stenflo J.,  
RA Drakenberg T.;  
RT "Solution structure of the N-terminal EGF-like domain from human  
RT factor VII.";  
RL Biochemistry 37:10605-10615(1998).  
RN [11]  
RP VARIANT GLN-364.  
RX MEDLINE=91300046; PubMed=2070047;  
RA O'Brien D.P., Gale K.M., Anderson J.S., McVey J.H., Miller G.J.,  
RA Meade T.W., Tuddenham E.G.D.;  
RT "Purification and characterization of factor VII 304-Gln: a variant  
RT molecule with reduced activity isolated from a clinically unaffected  
RT male.";  
RL Blood 78:132-140(1991).  
RN [12]  
RP VARIANTS GLN-364 AND PHE-370.  
RX MEDLINE=92340074; PubMed=1634227;  
RA Marchetti G., Patraccini P., Gemmati D., Derosa V., Pinotti M.,  
RA Rodorigo G., Casonato A., Girolami A., Bernardi F.;  
RT "Detection of two missense mutations and characterization of a repeat  
RT polymorphism in the factor VII gene (F7).";  
RL Hum. Genet. 89:497-502(1992).  
RN [13]  
RP VARIANT TYR-238.  
RX MEDLINE=93372811; PubMed=8364544;  
RA Marchetti G., Ferrati M., Patraccini P., Redaelli R., Bernardi F.;  
RT "A missense mutation (178Cys-->Tyr) and two neutral dimorphisms  
RT (115His and 333Ser) in the human coagulation factor VII gene.";  
RL Hum. Mol. Genet. 2:1055-1056(1993).  
RN [14]  
RP VARIANTS.  
RX MEDLINE=94061028; PubMed=8242057;  
RA Takamiya O., Kembal-Cook G., Martin D.M.A., Cooper D.N.,  
RA von Felten A., Meli E., Hahn I., Prangnell D.R., Lumley H.,  
RA Tuddenham E.G.D., McVey J.H.;  
RT "Detection of missense mutations by single-strand conformational  
RT polymorphism (SSCP) analysis in five dysfunctional variants of  
RT coagulation factor VII.";  
RL Hum. Mol. Genet. 2:1355-1359(1993).  
RN [15]  
RP VARIANTS CHARLOTTE GLN-139 AND GLN-212.  
RX MEDLINE=94264305; PubMed=8204879;  
RA Chaing S., Clarke B., Sridhara S., Chu K., Friedman P., Vandusen W.,  
RA Roberts H.R., Blajchman M., Monroe D.M., High K.A.;  
RT "Severe factor VII deficiency caused by mutations abolishing the  
RT cleavage site for activation and altering binding to tissue factor.";  
RL Blood 83:3524-3535(1994).  
RN [16]  
RP VARIANT SER-367.  
RX PubMed=7860081;  
RA Dewald G., Noethen M.M., Ruther K.;  
RT "A common Ser/Thr polymorphism in the perforin-homologous region of  
RT human complement component C7.";  
RL Hum. Hered. 44:301-304(1994).  
RN [17]  
RP VARIANT VAL-354.  
RX MEDLINE=95072589; PubMed=7981691;  
RA Bernardi F., Castaman G., Redaelli R., Pinotti M., Lunghi B.,  
RA Rodeghiero F., Marchetti G.;  
RT "Topologically equivalent mutations causing dysfunctional coagulation  
RT factors VII (294Ala-->Val) and X (334Ser-->Pro).";  
RL Hum. Mol. Genet. 3:1175-1177(1994).  
RN [18]  
RP VARIANT MIE HIS-307.  
RX MEDLINE=95064662; PubMed=7974346;  
RA Chiwa M., Hayashi T., Wada H., Minamikawa K., Shirakawa S., Suzuki K.;  
RT "Factor VII MIE: homozygous asymptomatic type I deficiency caused by  
RT an amino acid substitution of His (CAC) for Arg(247) (CGC) in the  
RT catalytic domain.";  
RL Thromb. Haemost. 71:773-777(1994).  
RN [19]  
RP VARIANT MET-419.

RX MEDLINE=96247510; PubMed=8652821;  
RA Arbini A.A., Mannucci P.M., Bauer K.A.;  
RT "A Thr359Met mutation in factor VII of a patient with a hereditary  
RT deficiency causes defective secretion of the molecule.";  
RL Blood 87:5085-5094(1996).  
RN [20]  
RP VARIANTS TRP-283; LYS-325; VAL-358; GLN-364; GLU-402 AND GLN-413.  
RX MEDLINE=97001216; PubMed=8844208;  
RA DOI=10.1002/(SICI)1098-1004(1996)8:2<108::AID-HUMU23.3.CO;2-6;  
RA Bernardi F., Castaman G., Pinotti M., Ferraresi P., di Iasio M.G.,  
RA Lunghi B., Rodeghiero F., Marchetti G.;  
RT "Mutation pattern in clinically asymptomatic coagulation factor VII  
RT deficiency.";  
RL Hum. Mutat. 8:108-115(1996).  
RN [21]  
RP VARIANT VAL-304.  
RX MEDLINE=97037613; PubMed=8883260;  
RA Tamary H., Fromovich Y., Shalmon L., Reich Z., Dym O., Lanir N.,  
RA Brenner B., Paz M., Luder A.S., Blau O., Korostishevsky M., Zaizov R.,  
RA Seligsohn U.;  
RT "Ala244Val is a common, probably ancient mutation causing factor VII  
RT deficiency in Moroccan and Iranian Jews.";  
RL Thromb. Haemost. 76:283-291(1996).  
RN [22]  
RP VARIANT MORIOKA PRO-13.  
RX MEDLINE=98235713; PubMed=9576180;  
RA Ozawa T., Takikawa Y., Niiya K., Ejiri N., Suzuki K., Sato S.,  
RA Sakuragawa N.;  
RT "Factor VII Moriooka (FVII L-26P): a homozygous missense mutation in  
RT the signal sequence identified in a patient with factor VII  
RT deficiency.";  
RL Br. J. Haematol. 101:47-49(1998).  
RN [23]  
RP VARIANTS MALTA THR-194 AND VAL-304.  
RX MEDLINE=98112461; PubMed=9452082;  
RA Alshinawi C., Scerri C., Gaidies R., Aquilina A., Felice A.E.;  
RT "Two new missense mutations (P134T and A244V) in the coagulation  
RT factor VII gene.";  
RL Hum. Mutat. Suppl. 1:S189-S191(1998).  
RN [24]

Query Match 63.1%; Score 2187; DB 1; Length 466;  
Best Local Similarity 97.5%; Pred. No. 2.7e-139;  
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ANAFLEELRPGSLRXCKXQCSEFFXARXIFKDAERTKLFWSYSDGDCASSPCQNGGS 60  
DB 61 ANAFLEELRPGSLRXCKXQCSEFFXARXIFKDAERTKLFWSYSDGDCASSPCQNGGS 120  
QY 61 CKDQLQSYICFCCLPAFEGNRCETHKDDQLICVNNNGGCEQYCSDHGTGTRKSCRCHEGYSL 120  
DB 121 CKDQLQSYICFCCLPAFEGNRCETHKDDQLICVNNNGGCEQYCSDHGTGTRKSCRCHEGYSL 180  
QY 121 LADGVSCPTVEYPCCKIPILEKRNASKPQGRIVGKCPKGCPCPQVLLVNGAQLCGG 180  
DB 181 LADGVSCPTVEYPCCKIPILEKRNASKPQGRIVGKCPKGCPCPQVLLVNGAQLCGG 240  
QY 181 TLINTIIVVSAACHFDKIKNWNLIIVLGEHDLSEHGDGEQSRRAQVLIIPSTVVPCTTN 240  
DB 241 TLINTIIVVSAACHFDKIKNWNLIIVLGEHDLSEHGDGEQSRRAQVLIIPSTVVPCTTN 300  
QY 241 HDIALRLHQPVVLTTHVVPCLPERTFSERTIAFVRFSLVSGWQLLDRGATALELWVL 300  
DB 301 HDIALRLHQPVVLTTHVVPCLPERTFSERTIAFVRFSLVSGWQLLDRGATALELWVL 360  
QY 301 NVPRMLTQDCLQSRKVGSPNITEYFACAGYSDGSKDSCKGSGGPHATHYGTWYLTG 360  
DB 361 NVPRMLTQDCLQSRKVGSPNITEYFACAGYSDGSKDSCKGSGGPHATHYGTWYLTG 420  
QY 361 IVSWGCGCATVGHFGVYTVRSQYIEWLQKLMRSEPRPGVLLRAPFP 406  
DB 421 IVSWGCGCATVGHFGVYTVRSQYIEWLQKLMRSEPRPGVLLRAPFP 466

RESULT 3  
FA7\_RABIT STANDARD; PRT; 444 AA.  
AC P98139; P79224;  
DT 01-FEB-1996 (Rel. 33, Created)  
DT 15-JUL-1998 (Rel. 36, Last sequence update)  
DT 25-OCT-2004 (Rel. 45, Last annotation update)  
DE Coagulation factor VII precursor (EC 3.4.21.21) (Serum prothrombin conversion accelerator).  
DE Name=F7;  
GN Oryctolagus cuniculus (Rabbit).  
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.  
OX NCBI\_TaxID=9986;  
RN [1]  
SEQUENCE FROM N.A.  
RP TISSUE=Liver;  
RC MEDLINE=93190306; PubMed=830365; DOI=10.1016/0049-3848(93)90048-S;  
RA Brothers A.B., Clarke B.J., Sheffield W.P., Blajchman M.A.;  
RT "Complete nucleotide sequence of the cDNA encoding rabbit coagulation factor VII.";  
RL Thromb. Res. Suppl. 69:231-238(1993).  
RN [2]  
REVISION TO 395.  
RP TISSUE=Liver;  
RA Ruiz S.R., Blajchman M.A., Clarke B.J.;  
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.  
CC -!- FUNCTION: Initiates the extrinsic pathway of blood coagulation. Serine protease that circulates in the blood in a zymogen form. Factor VII is converted to factor VIIa by factor Xa, factor XIIa, factor IXa, or thrombin by minor proteolysis. In the presence of tissue factor and calcium ions, factor VIIa then converts factor X to factor Xa by limited proteolysis. Factor VIIa will also convert factor IX to factor IXa in the presence of tissue factor and calcium (By similarity).  
CC -!- CATALYTIC ACTIVITY: Hydrolyzes one Arg-Ile bond in factor X to form factor Xa.  
CC -!- SUBUNIT: Heterodimer of a light chain and a heavy chain linked by a disulfide bond (By similarity).  
CC -!- TISSUE SPECIFICITY: Plasma.  
CC -!- PTM: The vitamin K-dependent, enzymatic carboxylation of some glutamate residues allows the modified protein to bind calcium (By similarity).  
CC -!- SIMILARITY: Belongs to the peptidase S1 family.  
CC -!- SIMILARITY: Contains 2 EGF-like domains.  
CC -!- SIMILARITY: Contains 1 gamma-carboxy-glutamate domain (Gla) domain.  
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CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to [license@sib-sib.ch](mailto:license@sib-sib.ch)).  
-----  
CC EMBL; U77477; AB37326.1; --  
CC HSP; P08709; 1PAK.  
CC MEROPS; S01.215; --  
CC InterPro; IPR000152; Asx hydroxyl\_S.  
CC InterPro; IPR000742; EGF\_2.  
CC InterPro; IPR001881; EGF\_Ca.  
CC InterPro; IPR001438; EGF\_II.  
CC InterPro; IPR006209; EGF\_like.  
CC InterPro; IPR002383; Gla\_blood.  
CC InterPro; IPR001254; Peptidase\_S1.  
CC InterPro; IPR001314; Peptidase\_S1A.  
CC InterPro; IPR009003; Pept\_Ser\_Cys.  
CC Pfam; P00008; EGF; 2.  
CC Pfam; P00594; Gla; 1.  
CC Pfam; P00089; Trypsin; 1.

DR PRINTS; PRO0722; CHYMOTRYPSIN.  
DR PRINTS; PRO0010; EGFELOOD.  
DR PRINTS; PRO0001; GLABLOOD.  
DR SMART; SM00179; EGF\_CA; 1.  
DR SMART; SM00069; GLA; 1.  
DR SMART; SM00020; TRYP\_SPC; 1.  
DR PROSITE; PS00010; ASX HYDROXYL; 1.  
DR PROSITE; PS00022; EGF\_1; 1.  
DR PROSITE; PS01186; EGF\_2; 1.  
DR PROSITE; PS00026; EGF\_3; 1.  
DR PROSITE; PS01187; EGF\_CA; 1.  
DR PROSITE; PS00011; GLA\_1; 1.  
DR PROSITE; PS00098; GLA\_2; 1.  
DR PROSITE; PS00134; TRYPSIN\_DOM; 1.  
DR PROSITE; PS00135; TRYPSIN\_SER; 1.  
KW Blood coagulation; Calcium-binding; EGF-like domain;  
KW Gamma-carboxyglutamic acid; Glycoprotein; Hydrolase; Hydroxylation;  
KW Plasma; Repeat; Serine protease; Signal; Vitamin K; Zymogen.  
FT SIGNAL 1 21 Potential.  
FT PROPEP 22 39 Potential.  
FT CHAIN 40 131 Factor VII light chain.  
FT CHAIN 192 444 Factor VII heavy chain.  
FT DOMAIN 40 84 Gla.  
FT DOMAIN 85 121 EGF-like 1, calcium-binding (Potential).  
FT DOMAIN 126 167 EGF-like 2.  
FT DOMAIN 192 444 Serine protease.  
FT SITE 191 192 Cleavage (by factor Xa, factor XIIa, factor IXa, or thrombin) (By similarity).  
FT ACT\_SITE 232 232 By similarity.  
FT ACT\_SITE 281 281 By similarity.  
FT ACT\_SITE 383 383 By similarity.  
FT BINDING 377 377 Substrate (By similarity).  
FT DISULFID 56 61 By similarity.  
FT DISULFID 89 100 By similarity.  
FT DISULFID 94 109 By similarity.  
FT DISULFID 111 120 By similarity.  
FT DISULFID 130 141 By similarity.  
FT DISULFID 137 151 By similarity.  
FT DISULFID 153 166 By similarity.  
FT DISULFID 174 301 By similarity.  
FT DISULFID 198 203 By similarity.  
FT DISULFID 217 233 By similarity.  
FT DISULFID 349 368 By similarity.  
FT DISULFID 379 407 By similarity.  
FT MOD\_RES 45 45 4-carboxyglutamate.  
FT MOD\_RES 46 46 4-carboxyglutamate.  
FT MOD\_RES 53 53 4-carboxyglutamate.  
FT MOD\_RES 55 55 4-carboxyglutamate.  
FT MOD\_RES 58 58 4-carboxyglutamate.  
FT MOD\_RES 59 59 4-carboxyglutamate.  
FT MOD\_RES 64 64 4-carboxyglutamate.  
FT MOD\_RES 65 65 4-carboxyglutamate.  
FT MOD\_RES 68 68 4-carboxyglutamate.  
FT MOD\_RES 74 74 4-carboxyglutamate.  
FT MOD\_RES 102 102 3-hydroxyaspartate (By similarity).  
FT CARBOHYD 211 211 N-linked (GlcNAc...) (Potential).  
FT CARBOHYD 242 242 N-linked (GlcNAc...) (Potential).  
FT CARBOHYD 306 306 N-linked (GlcNAc...) (Potential).  
SQ SEQUENCE 444 AA; 49011 MW; 0481ABC4FE5427F8 CRC64;  
Query Match 47.8%; Score 1654.5; DB 1; Length 444;  
Best Local Similarity 71.9%; Pred. No. 2.1e-103;  
Matches 292; Conservative 52; Mismatches 61; Indels 1; Gaps 1;  
QY 1 ANAFXXLRPGSLRXKXKXQCSFFXARXIFKADARTKLFWISYSDGDCASPCQNGGS 60  
Db 40 ANSFLELRPGSLRECKEELCSFEAREVFOSTERTKQFWITNDGDCASPCQNGGS 99  
QY 61 CKDQLOSVCFCCLPAFEGNCETHDQDLICVNGNGCCQYCSDDHTGTRKSRCHGEGYSL 120  
Db 100 CBDQIQSYICFCCLADFEGRNCRKNQDLICVNGNGCCQYCSDDHTGTRKSRCHGEGYSL 159



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FT MOD_RES 60 60 4-carboxyglutamate.
FT MOD_RES 61 61 4-carboxyglutamate.
FT MOD_RES 66 66 4-carboxyglutamate.
FT MOD_RES 67 67 4-carboxyglutamate.
FT MOD_RES 70 70 4-carboxyglutamate.
FT MOD_RES 76 76 4-carboxyglutamate.
FT MOD_RES 104 104 3-hydroxyaspartate (By similarity).
FT CARBOHYD 186 186 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 244 244 N-linked (GlcNAc...) (Potential).
FT CONFLICT 99 99 G -> V (in Ref. 2).
SQ SEQUENCE 446 AA; 25126 MW; 25126 AA45CBC96E CRC64;

Query Match 45.8%; Score 1587.5; DB 1; Length 446;
Best Local Similarity 68.1%; Pred. No. 7.1e-99;
Matches 275; Conservative 56; Mismatches 72; Indels 1; Gaps 1;

QY 1 ANAFLLXRLPGSLXKCKXKQCXFFXARXIFKDXRTKFWISYSDGDCASSPCQNGGS 60
Db 42 ANSLBELWPGSLERECENERQCSFEAREIFKSPERTKQFWIVYSDGDCASSPCQNGGT 101

QY 61 CKDOLQSYICFCLPAFEGRCNETHKDDOLICVNGGCEQYCSDDHTGTRKSCHEGYSYL 120
Db 102 CQHLKSYVCFCLDFEGRNCEKSKNEQLICANENGDCQYCRDHWGTRKSCHEGYTL 161

QY 121 LADGVSCPTVYPCGKIPILEKRNASKPQGRIVGKVCPCGKPCPQWQVLLVNGAOLCG 180
Db 162 QPDEVSKCPKVEYPCGRIPVWEKRNSSRQGRIVGNCVPCGKPCPQWQVLLKINGLLCGA 221

QY 181 TLINTWVSAACFPKIKNRNLIAVLGEHDLSEHGDGEQSRVAQVIPTSPYVPGTTN 240
Db 222 VLLDARWIVTAARCFDNIWYGNITVWGEHDSKDGDEQVRVTVQVIMPKYIRGKIN 281

QY 241 HDIALLRLHOPVVLTDHVVLPLCLPTEFSEBTLAFVRSIVSGWGLLDGRTALELWVL 300
Db 282 HDIALLRLHPRVFTDYVVLPLCLPEKSFSEBTLARFVRKSVGWGLLDGRTALELMSI 341

QY 301 NVPLMTQDCLQSKVRKGSNPTIYMFACAGYSDGSKDCKGSGGPHATHVGTWYLTG 360
Db 342 EVPLMTQDCLHAKHSSNTPKITEENFCAGYMDGTDCKGSGGPHATHVGTWYLTG 401

QY 361 IVSWGCGCATVGHGYTVTRVSVQVIEWLQKMRSEPRGVLLRAP 404
Db 402 VVSWGEGCAIGHGYTVTRVSVQVIEWLVRHMDSKLQGV-FLRP 444

RESULT 5
FA7_BOVIN STANDARD; PRT; 407 AA.
AC P22457;
DT 01-AUG-1991 (Rel. 19, Created)
DT 01-AUG-1991 (Rel. 19, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Coagulation factor VII (BC 3.4.21.21) (Serum prothrombin conversion
DE accelerator).
GN Name=F7;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE.
RX MEDLINE=89008362; PubMed=3049594;
RA Takeya H., Kawabata S., Nakagawa K., Yamamichi Y., Miyata T.,
RA Iwanaga S.;
RT "Bovine factor VII. Its purification and complete amino acid
RT sequence."
RL J. Biol. Chem. 263:14868-14877 (1988).
RN [2]
RP STRUCTURE OF CARBOHYDRATE ON SER-52.
RX MEDLINE=89213999; PubMed=3149637;
RA Hase S., Kawabata S., Nishimura H., Takeya H., Sueyoshi T., Miyata T.,
RA Iwanaga S., Takao T., Shimonishi Y., Ikenaka T.;

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RT "A new triaccharide sugar chain linked to a serine residue in bovine
RT blood coagulation factors VII and IX."
RL J. Biochem. 104:867-868 (1988).
RN [3]
RX STRUCTURE OF CARBOHYDRATE ON SER-52.
RP MEDLINE=91344709; PubMed=2129367;
RA Iwanaga S., Nishimura H., Kawabata S., Kisiel W., Hase S., Ikenaka T.;
RT "A new triaccharide sugar chain linked to a serine residue in the
RT first EGF-like domain of clotting factors VII and IX and protein Z."
RL Adv. Exp. Med. Biol. 281:121-131 (1990).
CC -!- FUNCTION: Initiates the extrinsic pathway of blood coagulation.
CC Serine protease that circulates in the blood in a zymogen form.
CC Factor VII is converted to factor VIIa by factor Xa, factor XIIa,
CC factor IXa, or thrombin by minor proteolysis. In the presence of
CC tissue factor and calcium ions, factor VIIa then converts factor X
CC to factor Xa by limited proteolysis. Factor VIIa will also convert
CC factor IX to factor IXa in the presence of tissue factor and
CC calcium.
CC -!- CATALYTIC ACTIVITY: Hydrolyzes one Arg-Ile bond in factor X to
CC form factor Xa.
CC -!- SUBUNIT: Heterodimer of a light chain and a heavy chain linked by
CC a disulfide bond.
CC -!- TISSUE SPECIFICITY: Plasma.
CC -!- PTM: The vitamin K-dependent, enzymatic carboxylation of some
CC glutamate residues allows the modified protein to bind calcium.
CC -!- SIMILARITY: Belongs to the peptidase S1 family.
CC -!- SIMILARITY: Contains 2 EGF-like domains.
CC -!- SIMILARITY: Contains 1 gamma-carboxy-glutamate domain (Gla)
CC domain.
DR PIR; A31979; KFB07.
DR HSP; P08709; 1BF9.
DR MEROPS; S01.215; -.
DR InterPro; IPR000152; Asx_hydroxyl_S.
DR InterPro; IPR000742; EGF_2.
DR InterPro; IPR001881; EGF_Ca.
DR InterPro; IPR001438; EGF_II.
DR InterPro; IPR006209; EGF_like.
DR InterPro; IPR002383; GLA_blood.
DR InterPro; IPR001254; Peptidase_S1.
DR InterPro; IPR001314; Peptidase_S1A.
DR InterPro; IPR009003; Pept_Ser_Cys.
DR Pfam; PF00008; EGF; 2.
DR Pfam; PF00594; Gla; 1.
DR PRINTS; PFO0089; Trypsin; 1.
DR PRINTS; PFO0722; CHYMOTRYPSIN.
DR PRINTS; PFO0010; EGF_BLOOD.
DR PRINTS; PFO0001; GLABLOOD.
DR SMART; SM00179; EGF_CA; 1.
DR SMART; SM00069; GLA; 1.
DR SMART; SM00020; Tryp_SPC; 1.
DR PROSITE; PS00010; ASX_HYDROXYL; 1.
DR PROSITE; PS00022; EGF_1; 1.
DR PROSITE; PS01186; EGF_2; 2.
DR PROSITE; PS00026; EGF_3; 1.
DR PROSITE; PS01187; EGF_CA; 1.
DR PROSITE; PS00011; GLA_1; 1.
DR PROSITE; PS00398; GLA_2; 1.
DR PROSITE; PS00240; TRYPSIN_DOM; 1.
DR PROSITE; PS00134; TRYPSIN_HIS; 1.
DR PROSITE; PS00135; TRYPSIN_SER; 1.
KW Blood coagulation; Calcium-binding; Direct protein sequencing;
KW EGF-like domain; Gamma-carboxyglutamic acid; Glycoprotein; Hydrolase;
FT CHAIN 1 152 Factor VII light chain.
FT CHAIN 153 407 Factor VII heavy chain.
FT DOMAIN 1 45 Gla.
FT DOMAIN 46 82 EGF-like 1, calcium-binding (Potential).
FT DOMAIN 87 128 EGF-like 2.
FT DOMAIN 153 407 Serine protease.
FT SITE 152 153 Cleavage (by factor Xa, factor XIIa,
FT ACT_SITE 193 193 factor IXa, or thrombin).
By similarity.

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FT ACT_SITE 242 By similarity.
FT ACT_SITE 344 By similarity.
FT BINDING 338 Substrate (By similarity).
FT DISULFID 17 By similarity.
FT DISULFID 50 By similarity.
FT DISULFID 55 By similarity.
FT DISULFID 72 By similarity.
FT DISULFID 91 By similarity.
FT DISULFID 98 By similarity.
FT DISULFID 112 By similarity.
FT DISULFID 114 By similarity.
FT DISULFID 135 By similarity.
FT DISULFID 159 By similarity.
FT DISULFID 178 By similarity.
FT DISULFID 310 By similarity.
FT DISULFID 340 By similarity.
FT MOD_RES 6 4-carboxyglutamate.
FT MOD_RES 7 4-carboxyglutamate.
FT MOD_RES 14 4-carboxyglutamate.
FT MOD_RES 16 4-carboxyglutamate.
FT MOD_RES 19 4-carboxyglutamate.
FT MOD_RES 20 4-carboxyglutamate.
FT MOD_RES 25 4-carboxyglutamate.
FT MOD_RES 26 4-carboxyglutamate.
FT MOD_RES 29 4-carboxyglutamate.
FT MOD_RES 35 4-carboxyglutamate.
FT CARBOHYD 52 O-linked (GlcNAc...).
FT CARBOHYD 145 N-linked (GlcNAc...).
FT CARBOHYD 203 N-linked (GlcNAc...).
FT SEQUENCE 407 AA; 44431 MW; 703E1FE0638F7F10 CRC64;

Query Match 45.8%; Score 1586; DB 1; Length 407;
Best Local Similarity 69.6%; Pred. No. 8e-99;
Matches 275; Conservative 55; Mismatches 65; Indels 0; Gaps 0;

QY 1 ANAFLLXRLGSLRXKXXCXXQCSFXRXARXIFKDXRTKLFWSYSGDQACSSPCQNGGS 60
DB 1 ANGFLLELLPGLSLERECEELCSFEEAHEIFRNEBTRQFWSYNDGDQACSSPCQNGGS 60
QY 61 CKDQLASYICFLCPAPEGRNCETHKDDQLICVNEGGCEQYCSDDHTGTRKSCRCHEGYSL 120
DB 61 CEDQLRSYICFPDGPGRNCETDKQSOLICANDGGCEQYCGADPGAGFCWCHGYAL 120
QY 121 LADGVSTPTVYPCGKIPILEKRNASKPQGRIVGGKCPKGPQVLLVNLVNAQLCGG 180
DB 121 QADGVSCAPTVEYPCGKIPVLEKRNASKPQGRIVGGHVCPKGPCPQAMLKMGALLCGG 180
QY 181 TLINTIWWVSAACHCFDKIKWRNLIAVLGEHDLSEHGDQSRVAVQVLIPTVYVGTIN 240
DB 181 TLVGPAAWVSAACHCFERLSRGNLTAVLGEHDLSEHGDQSRVAVQVLIPTVYVGTIN 240
QY 241 HDIALLRLHQPVLVTDHVPVLCPLPRTFSERTLAFVRFSLVSGWQLLDGATALELMLVL 300
DB 241 HDVALLQLAQPVALGDHVAFLCLPDPDFADQTLAFVRFSAVSGWQLLGERGVTVARKLMVV 300
QY 301 NVPLMTQDCLQSRKVGDSNPNTIYMFNCAGYSDGSKGSCGSGGPHATHYRGTYWLTG 360
DB 301 LVPRLLTQDCLQSRQRPGGVVTDNMFNCAGYSDGSKGSKGSGGPHATFRFGTWTFLTG 360
QY 361 IVSWGQCACVTHFGVTVTRVSQVLEWLOKLMRSEP 395
DB 361 VWSWGECACAAHFGIYTRVSRVYATMLRQLMGHPH 395

RESULT 6
FA7_RAT STANDARD; PRT; 446 AA.
AC Q8K3U6;
DT 05-JUL-2004 (Rel. 44, Created)
DT 05-JUL-2004 (Rel. 44, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Coagulation factor VII precursor (EC 3.4.21.21) (Serum prothrombin
DE conversion accelerator).
GN Name=F7;
```

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OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1];
RP SEQUENCE FROM N.A.
RC STRAIN=Sprague-Dawley;
RA Murphy K., Ramaker M.;
RT "Nucleotide sequence of the cDNA encoding rat coagulation factor
RT VII."
RL Submitted (JUL-2002) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: Initiates the extrinsic pathway of blood coagulation.
CC Serine protease that circulates in the blood in a zymogen form.
CC Factor VII is converted to factor VIIa by factor Xa, factor XIIa,
CC factor IXa, or thrombin by minor proteolysis. In the presence of
CC tissue factor and calcium ions, factor VIIa then converts factor X
CC to factor Xa by limited proteolysis. Factor VIIa will also convert
CC factor IX to factor IXa in the presence of tissue factor and
CC calcium (By similarity).
CC -!- CATALYTIC ACTIVITY: Hydrolyzes one Arg-|-Ile bond in factor X to
CC form factor Xa.
CC -!- SUBUNIT: Heterodimer of a light chain and a heavy chain linked by
CC a disulfide bond (By similarity).
CC -!- TISSUE SPECIFICITY: Plasma.
CC -!- PTM: The vitamin K-dependent, enzymatic carboxylation of some
CC glutamate residues allows the modified protein to bind calcium (By
CC similarity).
CC -!- SIMILARITY: Belongs to the peptidase S1 family.
CC -!- SIMILARITY: Contains 2 EGF-like domains.
CC -!- SIMILARITY: Contains 1 gamma-carboxy-glutamate domain (Gla)
CC domain.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL Outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; AF532184; AA095967.1; -.
CC HSP; P08709; IRLJ.
CC RGD; 628678; F7.
CC InterPro; IPR002086; Aldehyde_dehydr.
CC InterPro; IPR000152; Asx_hydroxyl_s.
CC InterPro; IPR000742; EGF_2.
CC InterPro; IPR001891; EGF_Ca.
CC InterPro; IPR001438; EGF_II.
CC InterPro; IPR006209; EGF_like.
CC InterPro; IPR002383; GLA_blood.
CC InterPro; IPR001254; Peptidase_S1.
CC InterPro; IPR001314; Peptidase_S1A.
CC InterPro; IPR009003; Pept_Ser_Cys.
CC InterPro; IPR000294; VitK_dep_GLA.
CC Pfam; PF00008; EGF; 2.
CC Pfam; PF00594; Gla; 1.
CC Pfam; PF00089; Trypsin; 1.
CC PRINTS; P00072; CHYMOTRYPSIN.
CC PRINTS; P00010; EGF_BLOOD.
CC PRINTS; P00001; GLABLOOD.
CC SMART; SM00179; EGF_CA; 1.
CC SMART; SM00069; GLA; 1.
CC SMART; SM00020; Tryp_SPC; 1.
CC PROSITE; PS00010; ASX_HYDROXYL; 1.
CC PROSITE; PS00022; EGF_1; 1.
CC PROSITE; PS01186; EGF_2; FALSE_NEG.
CC PROSITE; PS00026; EGF_3; 1.
CC PROSITE; PS01187; EGF_CA; 1.
CC PROSITE; PS00011; GLA_1; 1.
CC PROSITE; PS00998; GLA_2; 1.
CC PROSITE; PS0240; TRYPSIN_DOM; 1.
CC PROSITE; PS00134; TRYPSIN_HIS; 1.
CC PROSITE; PS00135; TRYPSIN_SER; 1.
```

Blood coagulation; Calcium-binding; EGF-like domain;  
Gamma-carboxyglutamic acid; Glycoprotein; Hydrolase; Hydroxylation;  
KW Plasma; Repeat; Serine protease; Signal; Vitamin K; Zymogen.  
FT SIGNAL 1 24 Potential.  
FT PROPEP 25 41 Potential.  
FT CHAIN 42 193 Factor VII light chain (By similarity).  
FT CHAIN 194 446 Factor VII heavy chain (By similarity).  
FT DOMAIN 42 86 Gla.  
FT DOMAIN 87 123 EGF-like 1, calcium-binding (Potential).  
FT DOMAIN 128 169 EGF-like 2.  
FT DOMAIN 194 446 Serine protease.  
FT SITE 193 194 Cleavage (by factor Xa, factor XIIa,  
factor IXa, or thrombin) (By similarity).  
FT ACT\_SITE 234 234 By similarity.  
FT ACT\_SITE 283 283 By similarity.  
FT ACT\_SITE 385 385 By similarity.  
FT BINDING 379 379 Substrate (By similarity).  
FT DISULFID -58 63 By similarity.  
FT DISULFID 91 102 By similarity.  
FT DISULFID 96 111 By similarity.  
FT DISULFID 113 122 By similarity.  
FT DISULFID 132 143 By similarity.  
FT DISULFID 139 153 By similarity.  
FT DISULFID 155 168 By similarity.  
FT DISULFID 176 303 By similarity.  
FT DISULFID 200 205 By similarity.  
FT DISULFID 219 235 By similarity.  
FT DISULFID 351 370 By similarity.  
FT DISULFID 381 409 By similarity.  
FT MOD\_RES 47 47 4-carboxyglutamate (By similarity).  
FT MOD\_RES 48 48 4-carboxyglutamate (By similarity).  
FT MOD\_RES 55 55 4-carboxyglutamate (By similarity).  
FT MOD\_RES 57 57 4-carboxyglutamate (By similarity).  
FT MOD\_RES 60 60 4-carboxyglutamate (By similarity).  
FT MOD\_RES 61 61 4-carboxyglutamate (By similarity).  
FT MOD\_RES 66 66 4-carboxyglutamate (By similarity).  
FT MOD\_RES 67 67 4-carboxyglutamate (By similarity).  
FT MOD\_RES 70 70 4-carboxyglutamate (By similarity).  
FT MOD\_RES 76 76 4-carboxyglutamate (By similarity).  
FT MOD\_RES 104 104 3-hydroxyaspartate (By similarity).  
FT CARBOHYD 186 186 N-linked (GlcNAc...) (Potential).  
FT CARBOHYD 244 244 N-linked (GlcNAc...) (Potential).  
SQ SEQUENCE 446 AA; 50399 MW; 292985BFF19C0AA CRC64;  
Query Match 44.5%; Score 1541; DB 1; Length 446;  
Best Local Similarity 67.4%; Pred. No. 9.7e-96;  
Matches 269; Conservative 54; Mismatches 76; Indels 0; Gaps 0;  
QY 1 ANAFLXXLRPGSLXRXKXQCSXXARXIFKDAKTKLFWISYDGDQACASPCQNGGS 60  
DB 42 ANSLLELWSSLERECNEERCSEFEARIFKSPERTKQFTWITYSDGDQACASPCQNGGT 101  
QY 61 CKDOLQSYICFCLPAFEGNCEHCKDDOLICUNENGCEQYCSDDHTGTVRSCHRGYSI 120  
DB 102 CQDHLKSYVCFCLDPEGRNCEKKNKEQITCANENGDCDQYCRDVGTRKTSCHDEYYL 161  
QY 121 LADGVSTVTEYPCGKIPLEKRNASKPQGRIVGGKVCPCGBCPQVLLLVNAGQLCGG 180  
DB 162 QPDEVSKCPKEVPCGRIPVEKGNFSRPGGRIVGGVCPKGCPCQVAVLKNEALLCGA 221  
QY 181 TLINTIIVVSAHCFDKIKNRNLIAVLGEHDLSEHDGDEQGRRAQVITPSTVPGTNN 240  
DB 222 VLLDTRWITAAHCFDKGLVNITVVLGEHDFSEKEGTEQVRVLEQVIMPNKYTRGRD 281  
QY 241 HDIALRLHOPVVLTDHVVPLCLPERTFSERTLA FVRFSILVSGWQLLDRGATALEMVL 300  
DB 282 HDIALVRLHRPFTDVIYVPLCLPERAFSENTLASIRFSKVSQWQLLDRGATALEMVI 341  
QY 301 NVPRMLTQDLOQSRKVGSPNITETWFCAGYSDGSKDCKGDSGGPHATHYRGTYWLTG 360  
DB 342 EYPRMLTQDCLBHAHAKSANTPRITENWFCAGYMDGTDKADCKGDSGGPHATHYRGTYWLTG 401  
QY 361 IVSWGQGCATVGHFGVYTRVSQVYIEWLQKLMRSEPRPGV 399

Db 402 VVSWGEGCAIGHGVYTRVSQVYIDWLVMYKMSKLRVGI 440  
RESULT 7  
QY 72351  
ID Q72351 PRELIMINARY; PRT; 482 AA.  
AC Q72351;  
DT 01-OCT-2003 (TrEMBLrel. 25, Created)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last sequence update)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)  
DE Hypothetical protein DKFZp686N02209;  
GN Name=DKFZp686N02209;  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_Taxid=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE=Human rectum tumor;  
RA Bloeker H., Boecher M., Mewes H.W., Weil B., Amid C., Osanger A.,  
RA Fobo G., Han M., Wiemann S.;  
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.  
DR EMBL; BX538118; CAD98026.1; -.  
DR HSSP; P01857; 1HZH.  
DR InterPro; IPR007110; IG-like.  
DR InterPro; IPR003597; IG\_c1.  
DR InterPro; IPR003006; IG\_MHC.  
DR InterPro; IPR003596; IG\_v.  
DR Pfam; PF07654; Cl-set; 3.  
DR SMART; SM00406; IGV; 1.  
DR PROSITE; PS00835; IG\_LIKE; 4.  
DR PROSITE; PS00290; IG\_MHC; UNKNOWN\_2.  
KW Hypothetical protein.  
SQ SEQUENCE 482 AA; 52852 MW; EDA75F1901D1A034 CRC64;  
Query Match 36.7%; Score 1272.5; DB 2; Length 482;  
Best Local Similarity 53.1%; Pred. No. 1.4e-77;  
Matches 286; Conservative 26; Mismatches 104; Indels 123; Gaps 15;  
QY 150 QGRIV--GKVCPCGCEPQVLLVNGAQLCGTINTIIVVSAHCFDKIK-----NWRN 203  
DB 20 QAQVVEGSGVVQPGR-SLRLSIASGFSFG-----SAMHQLQIPKGLEWVA 68  
QY 204 LIAVLGEHDLSEHDGDEQSRRAQVITPSTVYVPG-----TTNHDIALRLH-QPVVLTDHV 258  
DB 69 VLSYDGNHKLX-----SDSVKGRFTISRDNKSKSLFLVNSLTSADTA 111  
QY 259 VPLCLPERTFSERTLA-----FVRFSILVSGWQLLDRGATALEMVLNVPRLMTQDCL 311  
DB 112 IYVC--ARDFHSKTTSIFGLIPLFYFSAMDTWG---RGTTVIV----- 150  
QY 312 QQSRKVGSDSPNITETWFCAGYSDGSKDCKGDSGGPHATHYRGTYWLTG----- 360  
DB 151 -----SSASTKGPSVFPLAPSSKSTGGTAAALGCLVKDYPP 186  
QY 361 ---IVSWGQGCATVG-----HFGVY-----TRVSQYIEWLQKLMRSEPRPGVLLR 402  
DB 187 EPTVTSWNSGALTSQVHTFPVAVLQSSGLYSLSSVTVPSSSISLGTQTYICNVNHPKS---N 243  
QY 403 APFPGSABPKGCDKTHTCPCPAPPELLGGPSVFLPPKPKDTLMISRTPEVTCVVDVSH 462  
DB 244 TKVDKKEVPEKSKDKTHTCPCPAPPELLGGPSVFLPPKPKDTLMISRTPEVTCVVDVSH 303  
QY 463 EDPKVEKFNWYDGVGVHNAKTKPREQYNSTYRVVSVLTVLHODMNLNGKEYCKCKSNKAL 522  
DB 304 EDPKVEKFNWYDGVGVHNAKTKPREQYNSTYRVVSVLTVLHODMNLNGKEYCKCKSNKAL 363  
QY 523 PAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPE 582  
DB 364 PAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPE 423  
QY 583 NNYKTTTPVLDSGDSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641



Query Match 36.7%; Score 1270.5; DB 2; Length 469;  
 Best Local Similarity 70.8%; Pred. No. 1.8e-77;  
 Matches 257; Conservative 6; Mismatches 52; Indels 48; Gaps 5;

QY 324 TEYMFAGYSDG-----SKDSCKGSGGPHATHYRGTYLWG----- 360  
 DB 110 TALFYCATKSRGQVDFDSWGQGLTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVK 169  
 QY 361 -----IVSWGQGCATVG-----HFGVY-----TRVSQYIEWLQKMRSEPRPG 398  
 DB 170 DYFPEPVTWNSGALTSVHTPPPAVLQSSGLYSVTVTPSSSLGTQTYICNVNHKPS 229  
 QY 399 VLLRAPFPGSAEPKCDKTHTCPPCPAPELGPGSVFLPPPKPOTLMISRTPEVTCVV 458  
 DB 230 ---NTKVDKKVEPKSCDKTHTCPPCPAPELGPGSVFLPPPKPOTLMISRTPEVTCVV 286  
 QY 459 DVSHEDPEVKFNWYVDGVEVHNAKTPREEQNSTYRVVSVLTVLHQDWLNGKEYCKKVS 518  
 DB 287 DVSHEDPEVKFNWYVDGVEVHNAKTPREEQNSTYRVVSVLTVLHQDWLNGKEYCKKVS 346  
 QY 519 NKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESN 578  
 DB 347 NKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESN 406  
 QY 579 GQPNENYKTPPPVLDSDGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKLSLS 638  
 DB 407 GQPNENYKTPPPVLDSDGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKLSLS 466  
 QY 639 PGK 641  
 DB 467 PGK 469

## RESULT 10

Q6GMX6 PRELIMINARY; PRT; 465 AA.

AC Q6GMX6;  
 DT 05-JUL-2004 (TEMBLrel. 27, Created)  
 DT 05-JUL-2004 (TEMBLrel. 27, Last sequence update)  
 DT 05-JUL-2004 (TEMBLrel. 27, Last annotation update)  
 DE Hypothetical protein.  
 OS Homo sapiens (Human).  
 OC Eukaryota; Metazoa;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 OX NCBI\_TaxID=9606;  
 RN [1]  
 RP SEQUENCE FROM N.A.

RC TISSUE=Primary B-Cells;  
 RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;  
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Dege J.G.,  
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,  
 RA Altschul S.F., Zeeberg B., Buettow K.H., Schaefer C.F., Bhat N.K.,  
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,  
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,  
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,  
 RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C.,  
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,  
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,  
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,  
 RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,  
 RA Fahey J., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,  
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,  
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,  
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,  
 RA Krzywinski M.I., Skalka U., Smillius D.E., Schnerker A., Schein J.E.,  
 RA Jones S.J., Marra M.A.;  
 RT "Generation and initial analysis of more than 15,000 full-length human  
 and mouse cDNA sequences.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Primary B-Cells;

RA Strausberg R.;  
 RL Submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.

DR EMBL; BC073766; AAH73766.1; --  
 DR InterPro; IPR003599; IG-  
 DR InterPro; IPR007110; IG-like.  
 DR InterPro; IPR003597; IG-cl.  
 DR InterPro; IPR003006; IG\_MHC.  
 DR InterPro; IPR003596; IG\_v.  
 DR Pfam; PF07654; CI-set; 3.  
 DR Pfam; PF00047; IG; 4.  
 DR SMART; SM00409; IG; 2.  
 DR SMART; SM00407; IGC1; 3.  
 DR SMART; SM00406; IGV; 1.  
 DR PROSITE; PS08135; IG LIKE; 4.  
 DR PROSITE; PS00290; IG\_MHC; UNKNOWN\_2.  
 KW Hypothetical protein.

SQ SEQUENCE 465 AA; 51083 MW; B3A9B7D0FDB1386E CRC64;

Query Match 36.6%; Score 1269.5; DB 2; Length 465;

Best Local Similarity 62.7%; Pred. No. 2.1e-77;  
 Matches 269; Conservative 21; Mismatches 84; Indels 55; Gaps 10;

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DB 71 YTSGSTNTPSLKSRVTMSVDTSKNQFSLKLSVTAADTAVYTCARGRTFYDYWGQ--- 127

QY 290 RGATALEMLVNLVRLMTQDCLQQSRKVGDSNITEYMFCAVYSGSKDSCKGSGGPHA 349

DB 128 -GT-----LVTVSSASTK-----GPSVFPL-----APSSKSTSGGTAA 159

QY 350 THYRGTYLWG--IVSWGQGCATVG-----HFGVY-----TRVSQYIEWLQKLMR 392

DB 160 LGCLVKDYFPEPVTWNSGALTSVHTPPPAVLQSSGLYSVTVTPSSSLGTQTYICN 219

QY 393 SEPRFGVLLRAPPGSAEPKCDKTHTCPPCPAPELGPGSVFLPPPKPOTLMISRTPE 452

DB 220 VNHKPS---NTKVDKKVEPKSCDKTHTCPPCPAPELGPGSVFLPPPKPOTLMISRTPE 276

QY 453 VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTPREEQNSTYRVVSVLTVLHQDWLNGKE 512

DB 277 VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTPREEQNSTYRVVSVLTVLHQDWLNGKE 336

QY 513 YKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA 572

DB 337 YKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA 396

QY 573 VEWESNGQPNENYKTPPPVLDSDGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQ 632

DB 397 VEWESNGQPNENYKTPPPVLDSDGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQ 456

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## RESULT 11

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 DT 21-JUL-1986 (Rel. 01, Created)  
 DT 21-JUL-1986 (Rel. 01, Last sequence update)  
 DT 25-OCT-2004 (Rel. 45, Last annotation update)  
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 OX NCBI\_TaxID=9606;  
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 RP SEQUENCE FROM N.A.  
 RX MEDLINE=8227432; PubMed=6287432;  
 RA Ellison J.W., Berson B.J., Hood L.E.;  
 RT "The nucleotide sequence of a human immunoglobulin C gamma1 gene.";

RL Nucleic Acids Res. 10:4071-4079(1982).  
RN [2]  
RP SEQUENCE OF 1-135 (MYELOMA PROTEIN EU).  
RX MEDLINE=71064024; PubMed=5489771;  
RA Cunningham B.A., Rutishauser U., Gall W.E., Gottlieb P.D.,  
RA Wexdal M.J., Edelman G.M.;  
RT "The covalent structure of a human gamma G-immunoglobulin. VII. Amino  
RT acid sequence of heavy-chain cyanogen bromide fragments H1-H4.";  
RL Biochemistry 9:3161-3170(1970).  
RN [3]  
RP SEQUENCE OF 136-329 (EU).  
RX MEDLINE=71064025; PubMed=5530842;  
RA Rutishauser U., Cunningham B.A., Bennett C., Konigsberg W.H.,  
RA Edelman G.M.;  
RT "The covalent structure of a human gamma G-immunoglobulin. 8. Amino  
RT acid sequence of heavy-chain cyanogen bromide fragments H5-H7.";  
RL Biochemistry 9:3171-3181(1970).  
RN [4]  
RP SEQUENCE (MYELOMA PROTEIN NIE).  
RX MEDLINE=77070269; PubMed=826475;  
RA Ponstingl H., Hilschmann N.;  
RT "The rule of antibody structure. The primary structure of a monoclonal  
RT IgG1 immunoglobulin (myeloma protein NIE). III. The chymotryptic  
RT peptides of the H-chain, alignment of the tryptic peptides and  
RT discussion of the complete structure.";  
RL Hoppe-Seyler's Z. Physiol. Chem. 357:1571-1604(1976).  
RN [5]  
RP SEQUENCE (MYELOMA PROTEIN KOL), AND DISULFIDE BONDS.  
RX MEDLINE=83289131; PubMed=6884994;  
RA Schmidt W.E., Jung H.-D., Palm W., Hilschmann N.;  
RT "Three-dimensional structure determination of antibodies. Primary  
RT structure of crystallized monoclonal immunoglobulin IgG1 KOL, I.";  
RL Hoppe-Seyler's Z. Physiol. Chem. 364:713-747(1983).  
RN [6]  
RP DISULFIDE BONDS.  
RX MEDLINE=71064027; PubMed=4923144;  
RA Gall W.E., Edelman G.M.;  
RT "The covalent structure of a human gamma G-immunoglobulin. X.  
RT Intrachain disulfide bonds.";  
RL Biochemistry 9:3188-3196(1970).  
RN [7]  
RP DISULFIDE BONDS.  
RX MEDLINE=77070267; PubMed=1002129;  
RA Dreker L., Schwarz J., Reichel W., Hilschmann N.;  
RT "Rule of antibody structure. The primary structure of a monoclonal  
RT IgG1 immunoglobulin (myeloma protein NIE). I: purification and  
RT characterization of the protein, the L- and H-chains, the cyanogen  
RT bromide cleavage products, and the disulfide bridges.";  
RL Hoppe-Seyler's Z. Physiol. Chem. 357:1515-1540(1976).  
RN [8]  
RP X-RAY CRYSTALLOGRAPHY (2.9 ANGSTROMS).  
RX MEDLINE=81208100; PubMed=7236608;  
RA Deisenhofer J.;  
RT "Crystallographic refinement and atomic models of a human Fc fragment  
RT and its complex with fragment B of protein A from Staphylococcus  
RT aureus at 2.9- and 2.8-A resolution.";  
RL Biochemistry 20:2361-2370(1981).  
RN [9]  
RP MISCELLANEOUS: NIE has the GIM(17) allotypic marker, 97-K, and the  
CC GIM(1) markers, 239-D and 241-L. KOL and EU sequences have the  
CC GIM(3) marker and the GIM (non-1) markers.  
CC -1- MISCELLANEOUS: NIE also differs in the amidation states of 35,  
CC 116, 198, 269 and 272.  
CC -1- MISCELLANEOUS: EU also differs in the amidation states of residues  
CC 155, 166, 177, 195, 198, 269, and 272 and in the order of residues  
CC 268-272.  
CC -1- MISCELLANEOUS: KOL also differs in the amidation states of  
CC residues 198, 267 and 272.  
CC -----  
CC This SWISS-PROT entry is copyright. It is produced through a collaboration  
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -  
CC the European Bioinformatics Institute. There are no restrictions on its  
CC use by non-profit institutions as long as its content is in no way  
CC modified and this statement is not removed. Usage by and for commercial  
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CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).  
CC -----  
DR EMBL; J00228; AAC82527.1; ALT\_INIT.  
DR PIR; A93433; GHU.  
DR PDB; 1AJ7; X-ray; H=1-103.  
DR PDB; 1D51; X-ray; B/H=1-101.  
DR PDB; 1D51; X-ray; H=1-101.  
DR PDB; 1D6V; X-ray; H=1-101.  
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DR PDB; 1L6X; X-ray; A/B=107-330.  
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DR Genew; HGNC:5525; IGHG1.  
DR MTM; 147100; --  
DR GO; 0005624; C:membrane fraction; NAS.  
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DR GO; 0006955; P:immune response; NAS.  
DR InterPro; IPR007110; Ig-like.  
DR InterPro; IPR003006; Ig\_MHC.  
DR Pfam; PF00047; ig; 3.  
DR PROSITE; PS00835; IG\_LIKE; 3.  
DR PROSITE; PS00290; IG\_MHC; 2.  
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KW Immunoglobulin C region; Immunoglobulin domain.  
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FT STRAND 122 126  
FT HELIX 130 134  
FT TURN 136 137  
FT STRAND 141 149  
FT STRAND 157 162  
FT TURN 163 164

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or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).  
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PDB; 1D51; X-ray; B/H=1-101.  
PDB; 1D51; X-ray; H=1-101.  
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PDB; 1DN2; X-ray; A/B=120-326.  
PDB; 1E4K; X-ray; A/B=106-329.  
PDB; 1FC1; X-ray; A/B=106-329.  
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PDB; 1FCC; X-ray; A=121-326.  
PDB; 1H2H; X-ray; H/K=1-330.  
PDB; 1I72; X-ray; B/D=1-103.  
PDB; 1IIX; X-ray; A/B=107-330.  
PDB; 1L6X; X-ray; A/B=107-330.  
PDB; 1L6X; X-ray; A=120-326.  
PDB; 1OQX; X-ray; A/B=119-330.  
PDB; 2RCS; X-ray; H=1-103.  
Genew; HGNC:5525; IGHG1.  
MTM; 147100; --

GO; 0005624; C:membrane fraction; NAS.  
GO; 0003823; F:antigen binding; TAS.  
GO; 0006955; P:immune response; NAS.  
InterPro; IPR007110; Ig-like.  
InterPro; IPR003006; Ig\_MHC.  
Pfam; PF00047; ig; 3.  
PROSITE; PS00835; IG\_LIKE; 3.  
PROSITE; PS00290; IG\_MHC; 2.

3D-structure; Direct protein sequencing; Glycoprotein;  
Immunoglobulin C region; Immunoglobulin domain.

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DOMAIN 1 98 CH1.  
DOMAIN 99 110 Hinge.  
DOMAIN 111 223 CH2.  
DOMAIN 224 330 CH3.  
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DISULFID 103 103 Interchain (with light chain).  
DISULFID 109 109 Interchain (with heavy chain).  
DISULFID 112 112 Interchain (with heavy chain).  
DISULFID 144 204  
DISULFID 250 308  
CARBOHYD 180 180  
VARIANT 97 97  
VARIANT 239 239 N-linked (GlcNAc...).  
VARIANT 241 241 K -> R (in GIM(3) marker).  
VARIANT 241 241 D -> E (in GIM(non-1) marker).  
VARIANT 241 241 L -> M (in GIM(non-1) marker).  
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TURN 163 164

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FT STRAND 319 324
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Query Match 36.5%; Score 1265; DB 1; Length 330;
Best Local Similarity 78.1%; Pred. No. 2.8e-77;
Matches 250; Conservative 4; Mismatches 46; Indels 20; Gaps 4;

QY 339 SCKGDSGGPHATHYRGTYLTG--IVSWGQGCATVG-----HFGVY-----TRVS 381
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QY 382 QYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKHTHTCCPCAPPELLGGPSVFLPDK 441
DB 74 SSLGTQTYICNVNHKPS---NTKVDKKVEPKSCDKHTHTCCPCAPPELLGGPSVFLPDK 130
QY 442 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVFNHNAKTKPREEQNSTYRVVSVLT 501
DB 131 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVFNHNAKTKPREEQNSTYRVVSVLT 190
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DB 191 VLHODWLNKGYCKKVSNNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLT 250
QY 562 LVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSGFFLYSKLTVDKSRWQGNVFC 621
DB 251 LVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSGFFLYSKLTVDKSRWQGNVFC 310
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DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Hypothetical protein.
OS Homo sapiens (human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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RC TISSUE=Primary B-Cells;
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RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Primary B-Cells;
RA Strausberg R.;
RL Submitted (DEC-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC018747; AAH18747.1; -.
DR HSSP; P01861; IADO.
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DR InterPro; IPR003597; IG_c1.
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KW Hypothetical protein.
SQ SEQUENCE 470 AA; 51715 MW; 7B49556A11FD7D99 CRC64;

Query Match 36.5%; Score 1265; DB 2; Length 470;
Best Local Similarity 78.1%; Pred. No. 4.3e-77;
Matches 250; Conservative 4; Mismatches 46; Indels 20; Gaps 4;

QY 339 SCKGDSGGPHATHYRGTYLTG--IVSWGQGCATVG-----HFGVY-----TRVS 381
DB 154 SSKSTSGGTAALGCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPS 213
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DB 391 LVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSGFFLYSKLTVDKSRWQGNVFC 450
QY 622 MHEALHNHYTQKSLSLSPGK 641
DB 451 MHEALHNHYTQKSLSLSPGK 470

RESULT 13
Q7Z5W1
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ID Q7Z5W1 PRELIMINARY; PRT; 470 AA.
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DT 01-OCT-2003 (TrEMBLrel. 25, Created)
DT 01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Hypothetical protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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RN [1]
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RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
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RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
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RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skaleka U., Smailus D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
and mouse cDNA sequences."
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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DR Pfam; PF07654; C1-set; 3.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG_LIKE; 4.
DR PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW Hypothetical protein.
SQ SEQUENCE 470 AA; 51204 MW; 778CF34521483E1A CRC64;

Query Match 36.5%; Score 1265; DB 2; Length 470;
Best Local Similarity 78.1%; Pred. No. 4.3e-77;
Matches 250; Conservative 4; Mismatches 46; Indels 20; Gaps 4;

QY 339 SCKGDSGGPHATHYRGTYWLTG--IVSWGQGCATVG-----HFGVY-----TRVS 381
DB 154 SSKSTSGGTAALGCLVKDYFPEPTVWSNSGALTSGVHTFPAVLQSSGLYSLSSVTVPS 213
QY 382 QYIEWLQKLMRSRPGVLLRAPPFSAEPKSCDKTHKTCPCPAPELLGGPSVFLPFPKP 441
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DB 391 LVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSLKLTVDKSRWQQGNVFCSV 450
QY 622 MHEALHNHYTQKSLSLSPGK 641
DB 451 MHEALHNHYTQKSLSLSPGK 470

RESULT 14
Q6GMW7 PRELIMINARY; PRT; 475 AA.
AC Q6GMW7;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Hypothetical protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Spleen;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Haieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udell T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skaleka U., Smailus D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
and mouse cDNA sequences."
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Spleen;
RX Strausberg R.;
RA Submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.
RA EMBL; BC073782; AAH73782.1; -.
DR InterPro; IPR003599; Ig.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003597; Ig cl.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF07654; C1-set; 3.
DR Pfam; PF00047; Ig; 4.
DR SMART; SM00409; IGV; 2.
DR SMART; SM00407; IGV; 3.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG_LIKE; 4.
DR PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW Hypothetical protein.
SQ SEQUENCE 475 AA; 51987 MW; 2A1FE55D736860F8 CRC64;

Query Match 36.5%; Score 1265; DB 2; Length 475;
Best Local Similarity 78.1%; Pred. No. 4.4e-77;
Matches 250; Conservative 4; Mismatches 46; Indels 20; Gaps 4;

QY 339 SCKGDSGGPHATHYRGTYWLTG--IVSWGQGCATVG-----HFGVY-----TRVS 381
DB 159 SSKSTSGGTAALGCLVKDYFPEPTVWSNSGALTSGVHTFPAVLQSSGLYSLSSVTVPS 218
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QY 382 QYIEWLQKLMRSEPRGVLLRAPPGSAEPKSCDKTHTCPPCPAPPELLGGPSVFLPDKP 441
Db 219 SSLGTQYIYICNVNHPKSP---NTKVDKXVEPKSCDKTHTCPPCPAPPELLGGPSVFLPDKP 275
QY 442 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 501
Db 276 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 335
QY 502 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPOVYITLPSRDELTKNQVSLTLC 561
Db 336 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPOVYITLPSRDELTKNQVSLTLC 395
QY 562 LVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSLKLTVDKSRWQQGNVFSV 621
Db 396 LVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSLKLTVDKSRWQQGNVFSV 455
QY 622 MHEALHNHYTQKSLSLSPGK 641
Db 456 MHEALHNHYTQKSLSLSPGK 475

RESULT 15
Q6GMX1 PRELIMINARY; PRT; 476 AA.
AC Q6GMX1;
DT 05-JUL-2004 (T-EMBLrel. 27, Created)
DT 05-JUL-2004 (T-EMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (T-EMBLrel. 27, Last annotation update)
DE Hypothetical protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Spleen;
RX MEDLINE=23388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Reingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buettow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh P.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Tohiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullany S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
and mouse cDNA sequences";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Spleen;
RX Strausberg R.;
RL Submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.
DR EMBL: BC073773; AAH73773.1; -.
DR InterPro: IPR003599; Ig.
DR InterPro: IPR007110; Ig-like.
DR InterPro: IPR003597; Ig cl.
DR InterPro: IPR003006; Ig MHC.
DR InterPro: IPR003596; Ig_v.
DR Pfam: PF07654; Cl-set; 3.
DR Pfam: PF00047; Ig; 4.
DR SMART: SM00409; IG; 2.
DR SMART: SM00407; IGC1; 3.
DR SMART: SM00406; IGV; 1.

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DR PROSITE; PS50835; IG LIKE; 4.
DR PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW Hypothetical protein.
SQ SEQUENCE 476 AA; 52286 MW; 622AABA5CG2DDE9D CRC64;

Query Match 36.5%; Score 1265; DB 2; Length 476;
Best Local Similarity 78.1%; Pred. No. 4.4e-77;
Matches 250; Conservative 4; Mismatches 46; Indels 20; Gaps 4;

QY 339 SCKGDSGGPHATHYRGTYLTG--IVSWGQGCATVG-----HFGVY-----TRVS 381
Db 160 SSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPS 219
QY 382 QYIEWLQKLMRSEPRGVLLRAPPGSAEPKSCDKTHTCPPCPAPPELLGGPSVFLPDKP 441
Db 220 SSLGTQYIYICNVNHPKSP---NTKVDKXVEPKSCDKTHTCPPCPAPPELLGGPSVFLPDKP 276
QY 442 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 501
Db 277 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 336
QY 502 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPOVYITLPSRDELTKNQVSLTLC 561
Db 337 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPOVYITLPSRDELTKNQVSLTLC 396
QY 562 LVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSLKLTVDKSRWQQGNVFSV 621
Db 397 LVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSLKLTVDKSRWQQGNVFSV 456
QY 622 MHEALHNHYTQKSLSLSPGK 641
Db 457 MHEALHNHYTQKSLSLSPGK 476

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Search completed: February 10, 2005, 05:46:11  
Job time : 95.2497 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: February 10, 2005, 05:40:01 ; Search time 26.433 Seconds  
(without alignments)  
2333.257 Million cell updates/sec

Title: US-10-617-619A-8  
Perfect score: 3464  
Sequence: 1 ANAFLLXLRPGSLRXKCKXX.....MHEALHHYTKSLSPGK 641

Scoring table: BLOSUM62DX  
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : PIR\_79:.\*  
1: pir1:.\*  
2: pir2:.\*  
3: pir3:.\*  
4: pir4:.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2187	63.1	466	1 KFHU7	coagulation factor
2	1621	46.8	443	2 146932	coagulation factor
3	1586	45.8	407	1 KFB07	coagulation factor
4	1270	36.7	374	2 S69339	Ig heavy chain V r
5	1265	36.5	330	1 GHU	Ig gamma-1 chain C
6	1255	36.2	255	4 S31866	Ig gamma-1 chain C
7	1210	34.9	234	2 PT0207	Ig gamma chain C r
8	1184	34.2	377	2 A23511	Ig gamma-3 chain C
9	1182	34.1	377	2 A60764	Ig gamma-3 chain C
10	1159	33.5	289	1 G3HUM	Ig gamma-3 heavy c
11	1150	33.2	326	1 G2HU	Ig gamma-2 chain C
12	1142.5	33.0	327	1 G4HU	Ig gamma-4 chain C
13	929	26.8	323	1 GHRB	Ig gamma chain C r
14	914.5	26.4	328	2 147160	Ig gamma 2b chain
15	912.5	26.3	328	2 147159	Ig gamma 2a chain
16	907.5	26.2	329	1 G2GP	Ig gamma-2 chain C
17	903	26.1	277	2 147162	Ig gamma-4 chain c
18	892	25.8	328	2 147158	Ig gamma 1 chain c
19	884.5	25.5	328	2 147161	Ig gamma 3 chain c
20	879.5	25.4	492	1 EXBO	coagulation factor
21	878.5	25.4	475	1 EXCH	coagulation factor
22	878.5	25.4	488	1 EXHU	coagulation factor
23	867.5	25.0	416	1 KFB0	coagulation factor
24	867	25.0	461	1 KFHU	coagulation factor
25	854.5	25.0	470	2 S22080	Ig heavy chain pre
26	853.5	24.6	472	2 S31459	Ig gamma-1 chain -
27	853	24.6	308	2 C30554	Ig heavy chain C r
28	852	24.6	329	1 G3MSC	Ig gamma-3 chain C
29	851.5	24.6	482	1 EXRT	coagulation factor

ALIGNMENTS

RESULT 1  
KFHU7

Coagulation factor VIIa (EC 3.4.21.21) precursor [validated] - human

C;Species: Homo sapiens (man)

C;Date: 19-May-1989 #sequence\_revision 19-May-1994 #text\_change 09-Jul-2004

C;Accession: A28322; A28319; A31186; B31186; S63524

R;O'Hara, P.J.; Grant, F.J.; Haldeman, B.A.; Gray, C.L.; Insley, M.Y.; Hagen, F.S.; Mur

Proc. Natl. Acad. Sci. U.S.A. 84, 5158-5162, 1987

A;Title: Nucleotide sequence of the gene coding for human factor VII, a vitamin K-depen

A;Reference number: A28322; MUID:87260948; PMID:3037537

A;Accession: A28322

A;Molecule type: DNA

A;Residues: 1-466 <OHA>

A;Cross-references: UNIPROT:P08709; GB:J02933; NID:g180333; PIDN:AAA51983.1; PID:g180333

R;Hagen, F.S.; Gray, C.L.; O'Hara, P.; Grant, F.J.; Saari, G.C.; Woodbury, R.G.; Hart, C

Proc. Natl. Acad. Sci. U.S.A. 83, 2412-2416, 1986

A;Title: Characterization of a cDNA coding for human factor VII.

A;Reference number: A23819; MUID:86205965; PMID:3486420

A;Accession: A23819

A;Molecule type: mRNA

A;Residues: 1-466 <HAG>

A;Cross-references: GB:M13232; NID:g182799; PIDN:AAA88040.1; PID:g182801

R;Thim, L.; Bjoern, S.; Christensen, M.; Nicolaisen, E.M.; Lund-Hansen, T.; Pedersen, A

Biochemistry 27, 7785-7793, 1988

A;Title: Amino acid sequence and posttranslational modifications of human factor VII-a

A;Reference number: A90539; MUID:89088153; PMID:3264725

A;Accession: A31186

A;Molecule type: protein

A;Residues: 61-212 <THI>

A;Accession: B31186

A;Molecule type: protein

A;Residues: 213-466 <TH2>

R;Bjoern, S.; Foster, D.C.; Thim, L.; Wiberg, F.C.; Christensen, M.; Komiyama, Y.; Pede

J. Biol. Chem. 266, 11051-11057, 1991

A;Title: Human plasma and recombinant factor VII. Characterization of O-glycosylations

A;Reference number: A40529; MUID:91250411; PMID:1904059

A;Contents: annotation; carbohydrate binding sites

R;Persson, E.; Petersen, L.C.

Eur. J. Biochem. 234, 293-300, 1995

A;Title: Structurally and functionally distinct Ca(2+) binding sites in the gamma-carbo

A;Reference number: S63524; MUID:96096752; PMID:8529655

A;Accession: S63524

A;Molecule type: protein

C;Genetics:

A;Gene: GDB:F7

A;Cross-references: GDB:119897; OMIM:227500

A;Map position: 13q34-13q34

A;Introns: 22/1; 44/1; 97/3; 106/1; 144/1; 191/1; 227/3; 269/1

C;Function:

A;Description: catalyzes the proteolytic activation of coagulation factor X in the pres

coagulation factor IX in the presence of calcium and tissue factor

	Query Match	46.8%;	Score 1621;	DB 2;	Length 443;				
	Best Local Similarity	71.4%;	Pred. No. 2.3e-90;						
	Matches 290;	Conservative 52;	Mismatches 62;	Indels 2;	Gaps 2;				
Qy	1	ANAFLLXLPGSI	XXRCKXXQCS	FXKXRI	FKDAXRTKLFWISYSDGDCASSPQONGS 60				
Db	40	ANSFLEELRPGSLERCKEELCS	FEAREVFOSTERTQFWIYINDGDCASNPCONGS 99						
Qy	61	CKDQLQSYICFCFLPAFEGNRCNETHKDDQLICVNEGGCGEQYCS	DHTGTRKSR	CRCH	EGYSL 120				
Db	100	CEDQIQSYICFCFLADPEFGNCCNCKNDQLICMYENGGCGEQYCS	DHVGSQR	SR	CRCH	EGYTL 159			
Qy	121	LADGVSCCTVVEYPCGKIPIL	EKRNASR	POGRIV	GGKVC	PKGEC	PMOVLILLVNG	QALCGG 180	
Db	160	LVNGVSCCTVVDYPCGKVP	PALEKR	GNASNPQGRIV	GGKVC	PKGEC	PMOALMNGSTLL	CGG 219	
Qy	181	TLINTITWVYSAAHCFCDKIK	WNENL	IAVLGEH	DLSDH	GDGDEQ	RRVAQVIIP	SYYP	PGTTN 240

DB SLDJTHWVWSAAHCHDFKLSSEKNNI1VLGEHDLUSEHGDEQKRVQALLMFDKLVFGALD 273

QY 241 HDIALLRHQPVLTDHVVPELCLPERTFSERTIAFVPSLVSGWGQLLRGATALEMVL 300

280 NDIAALLKLLQFPAHLINNVVFUCLFENFSEGISIAITAKTSAVGVNQQLIIGALPKVELKAT 333

QY 301 NVPELMTQDCIQQSRKVGDSNITYMFCAGVSDGSKDCKSGSGGPHATHYRGTWLTG 360

Db  
340 DVPRMTQDCVEQSEHNPGSPVETGNMFCAGYLDGSKDACKDGGPHATSYHGT - YLTG 398

QY 361 IVSWGCGCATVGHFGVVYTRVSQYIEWLQKLMRSEPRPGVLLRAPPP 406

[illegible]

### RESULT 3

coagulation factor VIIa (EC 3.4.21.21) - bovine

C;Date: 21-May-1990 #sequence\_revision 23-Mar-1995 #text\_change 09-Jul-2004

R/Takeya, H.; Kawabata, S.; Nakagawa, K.; Yamamichi, Y.; Miyata, T.; Iwanaga, S.

A;Title: Bovine factor VII. Its purification and complete amino acid sequence.

A;Accession: A31979

A;Residues: 1-407 <TAK>

R;McMullen, B.A.; Fujikawa, K.; Kisiel, W.

A;Title: The occurrence of beta-hydroxyaspartic acid in the vitamin K-dependent blood coagulation factors

A;Accession: C20274

A;Residues: 58-62,'X',64-68 <MCM>

R;Hase, S.; Kawabata, S.; Nishimura, H.; Takeya, H.; Sueyoshi, T.; Miyata, T.; Iwanaga, T.

A;Title: A new trisaccharide sugar chain linked to a serine residue in bovine blood coag

A;Contents: annotation

**C;Function:** catalyzes the evolutionary activation of coagulation factor X in the presence of procoagulation.

gulation factor IX in the presence of calcium and tissue factor

C;Superfamily: coagulation factor X; EGF homology; Gla domain homology; trypsin homology

F;1-152/Product: coagulation factor VIIa light chain #status experimental <MAL>  
E;1-44/Domain: C1a domain homology (fragment) <CIA>

F;50-81/Domain: EGF homology <EG1>  
F;91-127/Domain: EGF homology <EG2>

F;153-407/Product: coagulation factor VIIa heavy chain #status experimental <MA2>

F:153-387/Domain: trypsin homology <TRY>  
F:6,7,14,16,19,20,25,26,29,34,35/Modified site: gamma-carboxyglutamic acid (Glu) #status  
F:17-22,50-61,55-70,72-81,91-102,98-112,114-127,135-262,159-164,178-194,310-329,340-368/  
F:52/Binding site: carbohydrate (Ser) (covalent) #status experimental  
F:63/Modified site: erythro-beta-hydroxyaspartic acid (Asp) (partial)  
F:145-203/Binding site: carbohydrate (Aan) (covalent) #status experimental  
F:152-153/Cleavage site: Arg-Ile (coagulation factor XIIa) #status experimental  
F:193,242,344/Active site: His, Asp, Ser #status predicted  
F:290-291/Cleavage site: Arg-Gly (coagulation factor Xa) #status experimental

Query Match 45.8%; Score 1586; DB 1; Length 407;  
Best Local Similarity 69.6%; Pred. No. 2.6e-88;  
Matches 275; Conservative 55; Mismatches 65; Indels 0; Gaps 0;

QY 1 ANAPLXXLRPGSLXKXQXCCXXARXIFKDXRKLFWISYSDGDCASSPCQNGGS 60  
DB 1 ANGFLBELLPGSLERECBELCSFEBAHEIFRNEERTRQFWSYNDGDCASSPCQNGGS 60

QY 61 CKDQLOSICFCPLPAREGRNCETHKDDOLICVNEGGCEQYCSDHGTGKRSCHEGYSL 120  
DB 61 CEDQLRSYICFCPDGPEGRNCETDKOSQLICANDNGGCEQYCGADFCAGRFWCHEGYAL 120

QY 121 LADGVSCPTVEYPCGKIPLEKRNASKPQGRIVGGKVCPEGKCPWQVLLLVNAGOLCGG 180  
DB 121 QADGVSCAPTVEYPCGKIPLEKRNASKPQGRIVGGKVCPEGKCPWQVLLLVNAGOLCGG 180

QY 181 TLINTIIVWSAAHCFDKIKNWRNLIAVLGSHDLSEHDGDSQSRRAQVIIPSTVPGTTN 240  
DB 181 TLVGPAAVWSAAHCFERLRSRGNLTAVLGSHDLRSVGEPEQERRVAQIIVPKQYVFGQTD 240

QY 241 HDIALRLHQPVLVTHVPLCLPERTFERTAFVRFSLVSGWGLDRGATALELMVL 300  
DB 241 HDVALLQLAQVVALGDHVPALCLPDPDFADQTLAFVRFSAVSGWGLDRGATARKLMV 300

QY 301 NVPLRTMDCLOQSRKVGDSPTNTEYMFACAGYSDGSKDCKGSGGPHATYRGTWYLTG 360  
DB 301 LVPLRLTQDCLOQSRORPGGVVTDNNFACAGYSDGSKDCKGSGGPHATFRFGTWYLTG 360

QY 361 IVSWGQCATVGHFVYVTRVSQVIEWLQKLMRSEP 395  
DB 361 VVSWGEGCAAGHGIYTRVSRVTAWLRQLMGHP 395

RESULT 4  
S69339  
Ig heavy chain V region precursor - human  
C:Species: Homo sapiens (man)  
C:Date: 19-Mar-1997 #sequence\_revision 19-Mar-1997 #text\_change 01-Dec-2000  
R:Khamilichi, A.A.; Aucouturier, P.; Preud'homme, J.L.; Cogne, M.  
Eur. J. Biochem. 229, 54-60, 1995  
A:Title: Structure of abnormal heavy chains in human heavy-chain-deposition disease.  
A:Reference number: S69339; MUID:95262687; PMID:7744049  
A:Accession: S69339  
A:Status: preliminary  
A:Molecule type: mRNA  
A:Residues: 1-374 <KHA>  
A:Cross-references: EMBL:X81695  
R:Khamilichi, A.A.  
submitted to the EMBL Data Library, September 1994  
A:Reference number: S72664  
A:Accession: S72664  
A:Status: preliminary  
A:Molecule type: mRNA  
A:Residues: 1-140, 'C', 142-374 <KH2>  
A:Cross-references: EMBL:X81695  
C:Superfamily: immunoglobulin C region; immunoglobulin homology

Query Match 36.78%; Score 1270; DB 2; Length 374;  
Best Local Similarity 65.8%; Pred. No. 2.5e-69;  
Matches 264; Conservative 19; Mismatches 60; Indels 58; Gaps 9;

QY 252 VVLTDHVVPLCLPERTFERTAFVRFSLVS---GWQLDRGATALELMVLNVPRLMTQ 308

Db 21 ITLKSGPTLVKPTQTLT-LTCTFSGFSLSKSGVGVGWIRQPPGQALEWAL-----IFWD 75  
QY 309 DCLQOSRKVGDSPTNTEYMFACAGYSDGSKDCKG-----SGGPHATYRGTWYLTG 360  
Db 76 DDKRYSPSLRTRLTIT-----KDTSKNVVLTWTVNDPADTATYCG-----YS 119  
QY 361 IVSWGQCATVGHFVYVTRVSQVIEWLQKLMRSEPGLLRAPFPFGSAEPKSCDKTHTC 420  
Db 120 VEGYGGQ-----YRFHSMGQ-----GTLVTV-----SSEPKSCDKTHTC 153  
QY 421 PPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKENWYVDGVEVHN 480  
Db 154 PPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKENWYVDGVEVHN 213  
QY 481 AKTKPREEOYNSTRYVSVLTVLHQLDNLGKEYCKVSNKALPAPIEKTISKAKGQPREP 540  
Db 214 AKTKPREEOYNSTRYVSVLTVLHQLDNLGKEYCKVSNKALPAPIEKTISKAKGQPREP 273  
QY 541 QVYTLPPSDELTKNOVSLTCLVKGYFPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 600  
Db 274 QVYTLPPSDEMTKNOVSLTCLVKGYFPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 333  
QY 601 YSKLTVDKSRWQGNVFCSCVMHEALHNYTKSLSLSPGK 641  
Db 334 YSKLTVDKSRWQGNVFCSCVMHEALHNYTKSLSLSPGK 374

RESULT 5  
GHU  
Ig gamma-1 chain C region - human  
C:Species: Homo sapiens (man)  
C:Date: 31-Jan-1981 #sequence\_revision 18-Aug-1982 #text\_change 09-Jul-2004  
C:Accession: A93433; S36861; S3887; B90563; A90564; B91668; A91723; A02146  
R:Ellison, J.W.; Bersson, B.J.; Hood, L.E.  
Nucleic Acids Res. 10, 4071-4079, 1982  
A:Title: The nucleotide sequence of a human immunoglobulin C-gamma gene.  
A:Reference number: A93433; MUID:82274238; PMID:6287432  
A:Accession: A93433  
A:Molecule type: DNA  
A:Residues: 1-330 <ELL>  
A:Cross-references: UNIPROT:P01857; EMBL:Z17370  
A:Note: this sequence has the Gln(17) allelic marker, 97-Lys, and the Gln(1) markers, R; Harris, L.J.  
submitted to the EMBL Data Library, October 1992  
A:Reference number: S33904  
A:Accession: S36861  
A:Molecule type: DNA  
A:Residues: 2-330 <HAR>  
A:Cross-references: EMBL:Z17370  
R:Takahashi, N.; Ueda, S.; Obata, M.; Nikaido, T.; Nakai, S.; Honjo, T.  
Cell 29, 671-679, 1982  
A:Title: Structure of human immunoglobulin gamma genes: implications for evolution of a  
A:Reference number: S33887; MUID:83001943; PMID:6811139  
A:Accession: S33887  
A:Molecule type: DNA  
A:Residues: 88-113; 235-330 <TAK>  
A:Cross-references: EMBL:Z17370  
R:Cunningham, B.A.; Rutishauser, U.; Gall, W.E.; Gottlieb, P.D.; Waxdal, M.J.; Edelman,  
Biochemistry 9, 3161-3170, 1970  
A:Title: The covalent structure of a human gammaG-immunoglobulin. VII. Amino acid sequ  
A:Reference number: A90563; MUID:71064024; PMID:5489771  
A:Contents: myeloma protein Eu  
A:Accession: B90563  
A:Molecule type: protein  
A:Residues: 1-96, 'R', 98-135 <CUN>  
A:Note: this sequence has the Gln(3) marker, 97-Arg  
R:Rutishauser, U.; Cunningham, B.A.; Bennett, C.; Konigsberg, W.H.; Edelman, G.M.  
Biochemistry 9, 3171-3181, 1970  
A:Title: The covalent structure of a human gammaG-immunoglobulin. VIII. Amino acid sequ  
A:Reference number: A90564; MUID:71064025; PMID:5530842  
A:Contents: Eu

A;Accession: A90564  
A;Molecule type: protein  
A;Residues: 136-154,'Q',156-165,'Q',167-176,'Q',178-194,'N',196-197,'D',199-238,'E',240,  
A;Note: this sequence has the Gln(non-1) markers, 239-Glu and 241-Met  
R;Ponsingl, H.; Hilschmann, N.  
Hoppe-Seyler's Z. Physiol. Chem. 357, 1571-1604, 1976  
A;Title: Die Primärstruktur eines monoklonalen IgG1-Immunglobulins (Myelomprotein Nie),  
igen Primärstruktur.  
A;Reference number: A91668; MUID:77070269; PMID:826475  
A;Contents: myeloma protein Nie  
A;Accession: B91668  
A;Molecule type: protein  
A;Residues: 1-34,'Q',36-96,'K',98-115,'Q',117-197,'D',199-238,'D',240,'L',242-268,'E',27  
A;Note: this sequence has the Gln(17) and Gln(1) markers  
R;Schmidt, W.E.; Jung, H.D.; Palm, W.; Hilschmann, N.  
Hoppe-Seyler's Z. Physiol. Chem. 364, 743-747, 1983  
A;Title: Die Primärstruktur des kristallisierten monoklonalen Immunglobulins IgG1 KOL  
A;Reference number: A91723; MUID:83289131; PMID:6884994  
A;Contents: myeloma protein KOL; disulfide bonds  
A;Accession: A91723  
A;Molecule type: protein  
A;Residues: 1-96,'R',98-197,'D',199-238,'E',240,'M',242-266,'D',268-271,'D',273-330 <SCH  
A;Note: this sequence has the Gln(3) and Gln(non-1) markers  
R;Gall, W.E.; Edelman, G.M.  
Biochemistry 9, 3188-3196, 1970  
A;Title: The covalent structure of a human gammaG-immunoglobulin. X. Intrachain disulfid  
A;Reference number: A90565; MUID:71064027; PMID:4923144  
A;Contents: annotation; disulfide bonds  
R;Dreker, L.; Schwarz, J.; Reichel, W.; Hilschmann, N.  
Hoppe-Seyler's Z. Physiol. Chem. 357, 1515-1540, 1976  
A;Title: Rule of antibody structure. The primary structure of monoclonal IgG1 immunoglob  
enbromide cleavage products, and the disulfide bridges.  
A;Reference number: A91667; MUID:77070267; PMID:1002129  
A;Contents: annotation; disulfide bonds  
C;Genetics:  
A;Gene: IGHG1  
A;Cross-references: GDB:120085; OMIM:147100  
A;Map position: 14q32.33-14q32.33  
A;Introns: 99/1; 114/1; 224/1  
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kap  
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into la  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
C;Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin  
F;20-85/Domain: immunoglobulin homology <IM1>  
F;137-206/Domain: immunoglobulin homology <IM2>  
F;243-310/Domain: immunoglobulin homology <IM3>  
F;27-83,144-204,250-308/Disulfide bonds: #status experimental  
F;103/Disulfide bonds: interchain (to light chain) #status experimental  
F;109,112/Disulfide bonds: interchain (to heavy chain) #status experimental  
F;180/Binding site: carbohydrate (Asn) (covalent) #status experimental

Query Match 36.5%; Score 1265; DB 1; Length 330;  
Best Local Similarity 78.1%; Pred. No. 4.4e-69;  
Matches 250; Conservative 4; Mismatches 46; Indels 20; Gaps 4;

QY 339 SCKGSDGGPHATHYRGTYLTG--IVSWGQCATVG-----HFGVY-----TRVS 381  
DB 14 SSKSTSGTAALCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPS 73  
QY 382 QYEWLQKMRSPRGVLLRAPFGSABPKSCDKTHTCCPCAPPELLGGPSVFLPPPK 441  
DB 74 SSLGTQTYICNVNHKPS---NTRVKKVPEPKSCDKTHTCCPCAPPELLGGPSVFLPPPK 130  
QY 442 KDTLMISRPEVTCVVVDVSHEDPEVKENWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 501  
DB 131 KDTLMISRPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 190  
QY 502 VLHODWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTLC 561  
DB 191 VLHODWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTLC 250  
QY 562 LVKGFYPSDIAVEWESNGQPENNYKTPPPVLDSDGSFFLYSKLTVDKSRWQQGNVPCSV 621

DB 251 LVKGFYPSDIAVEWESNGQPENNYKTPPPVLDSDGSFFLYSKLTVDKSRWQQGNVPCSV 310  
QY 622 MHEALHNHYTQKSLSLSPGK 641  
DB 311 MHEALHNHYTQKSLSLSPGK 330  
RESULT 6  
S31866  
Ig gamma-1 chain C region - synthetic  
C;Species: synthetic  
A;Note: Homo sapiens (man) gene engineered and expressed in Escherichia coli  
C;Date: 06-Jan-1995 #sequence\_revision 17-Mar-1997 #text\_change 19-May-2000  
C;Accession: S31866  
R;Filipula, D.  
submitted to the EMBL Data Library, February 1993  
A;Description: Screening method for protein-protein interactions of cloned gene products  
A;Reference number: S31866  
A;Accession: S31866  
A;Molecule type: mRNA  
A;Residues: 1-255 <FIL>  
A;Cross-references: EMBL:X70421; NID:G33068; PIDN:CAA49866.1; PID:G33069  
C;Keywords: immunoglobulin  
F;1-22/Region: Escherichia coli outer membrane protein A precursor  
F;23-255/Region: human Ig gamma-1 chain C region  
Query Match 36.2%; Score 1255; DB 4; Length 255;  
Best Local Similarity 99.6%; Pred. No. 1.4e-68;  
Matches 231; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 410 EPKSCDKTHTCCPCAPPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVK 469  
DB 24 ESKSCDKTHTCCPCAPPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVK 83  
QY 470 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 529  
DB 84 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 143  
QY 530 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTP 589  
DB 144 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTP 203  
QY 590 PVLDSGDSGFFLYSKLTVDKSRWQQGNVPCSVVMHEALHNHYTQKSLSLSPGK 641  
DB 204 PVLDSGDSGFFLYSKLTVDKSRWQQGNVPCSVVMHEALHNHYTQKSLSLSPGK 255  
RESULT 7  
PT0207  
Ig gamma chain C region - chimpanzee  
C;Species: Pan troglodytes (chimpanzee)  
C;Date: 23-Nov-1991 #sequence\_revision 23-Nov-1991 #text\_change 16-Jul-1999  
C;Accession: PT0207  
R;Ehrlich, P.H.; Moustafa, Z.A.; Oestberg, L.  
Mol. Immunol. 28, 319-322, 1991  
A;Title: Nucleotide sequence of chimpanzee FC and hinge regions.  
A;Reference number: PT0207; MUID:91287716; PMID:2062315  
A;Accession: PT0207  
A;Molecule type: mRNA  
A;Residues: 1-234 <EHR>  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
C;Keywords: immunoglobulin  
F;48-117/Domain: immunoglobulin homology <IMM>  
Query Match 34.9%; Score 1210; DB 2; Length 234;  
Best Local Similarity 98.7%; Pred. No. 6.4e-66;  
Matches 222; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 410 EPKSCDKTHTCCPCAPPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVK 469  
DB 10 EPKSCDKTHTCCPCAPPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVK 69  
QY 470 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 529



A;Cross-references: GDB:119339; OMIM:147120  
A;Map position: 14q32.33-14q32.33  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
C;Keywords: duplication; glycoprotein; immunoglobulin; pyroglutamic acid  
F;203-270/Domain: immunoglobulin homology <IMM>  
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental  
F;6,140/Binding site: carbohydrate (Asn) (covalent) #status experimental

Query Match 33.5%; Score 1159; DB 1; Length 289;  
Best Local Similarity 89.0%; Pred. No. 9.3e-63;  
Matches 211; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

QY 404 PFGSAEPKSCDTHCPCPAPELAGPSVFLFPPKPKDTLMISRTPEVTCVVDVSH 463  
DB 53 FCRCPKPEKSCDTHCPCPAPELAGPSVFLFPPKPKDTLMISRTPEVTCVVDVSH 112

QY 464 DPVEKFNWYVDGVEVHNATKPREQYNSTYRVSVLTVLHQLDGLNGKEYCKVSNKALP 523  
DB 113 DPEVQFNWYVDGVEVHNATKPREQYNSTYRVSVLTVLHQLDGLNGKEYCKVSNKALP 172

QY 524 APIEKTISKAKGPQRPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGOPEN 583  
DB 173 APIEKTISKAKGPQRPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGOPEN 232

QY 584 NYKTTPEVLDSGFFLYSKLTVDKSRWQGNVFCVSMVHEALHNHYTKSLSLSPG 640  
DB 233 NYNTTPEVLDSGFFLYSKLTVDKSRWQGNVFCVSMVHEALHNHYTKSLSLSPG 289

RESULT 11  
G2HU  
Ig gamma-2 chain C region - human  
A;Species: Homo sapiens (man)  
C;Date: 30-Apr-1981 #sequence revision 13-Jun-1983 #text\_change 09-Jul-2004  
C;Accession: A93906; A92809; A90752; A93132; A02148  
R;Ellison, J.; Hood, L.  
Proc. Natl. Acad. Sci. U.S.A. 79, 1984-1988, 1982  
A;Title: Linkage and sequence homology of two human immunoglobulin gamma heavy chain con  
A;Reference number: A93906; MUID:82137621; PMID:6804948  
A;Accession: A93906  
A;Molecule type: DNA  
A;Residues: 1-326 <ELL>  
A;Cross-references: UNIPROT:P01859; GB:V00554; GB:J00230; NID:G32759; PIDN:CAB58438.1; E  
A;Note: Lys-326 is probably removed posttranslationally  
R;Wang, A.C.; Tung, E.; Fudenberg, H.H.  
J. Immunol. 125, 1048-1054, 1980  
A;Title: The primary structure of a human IgG2 heavy chain: genetic, evolutionary, and f  
A;Reference number: A92809; MUID:81007873; PMID:6774012  
A;Contents: myeloma protein Til  
A;Accession: A92809  
A;Molecule type: protein  
A;Residues: 1-19, 'Q', 21-57, 'Z', 59, 'A', 61-193, 'D', 195-325 <WAN>  
A;Note: Trp-156 is at or near the complement-binding site  
R;Connell, G.E.; Parr, D.M.; Hofmann, T.  
Can. J. Biochem. 57, 758-767, 1979  
A;Title: The amino acid sequences of the three heavy chain constant region domains of a  
A;Reference number: A90752; MUID:80001357; PMID:113060  
A;Contents: myeloma protein Zie  
A;Accession: A90752  
A;Molecule type: protein  
A;Residues: 1-24, 'E', 26-57, 'EV', 60-85, 132-171, 'ZZZ', 175, 'B', 177-193, 'D', 195-196, 'Q', 198-  
A;Note: this sequence has since been revised  
R;Hofmann, T.; Parr, D.M.  
Mol. Immunol. 16, 923-925, 1979  
A;Title: A note on the amino acid sequence of residues 381-391 of human immunoglobulin C  
A;Reference number: A93132; MUID:80114419; PMID:1118920  
A;Contents: Zie  
A;Accession: A93132  
A;Molecule type: protein  
A;Residues: 238-275 <HOF>  
R;Hofmann, T.; Parr, D.M.  
submitted to the Atlas, March 1980  
A;Reference number: A94591

A;Contents: annotation; Zie, revisions to residues 25, 59, 60, and 264-268  
A;Note: the revised sequence differs from that shown in having 60-Ala and in the amidat  
ned

R;Milstein, C.; Frangione, B.  
Biochem. J. 121, 217-225, 1971  
A;Title: Disulfide bridges of the heavy chain of human immunoglobulin G2.  
A;Reference number: A90253; MUID:72033500; PMID:4940472  
A;Contents: annotation; myeloma protein Sa, disulfide bonds  
R;Frangione, B.; Milstein, C.; Pink, J.R.L.  
Nature 221, 145-148, 1969  
A;Title: Structural studies of immunoglobulin G.  
A;Reference number: A93157; MUID:69064124; PMID:5782707  
A;Contents: annotation; Sa, disulfide bonds  
C;Genetics:  
A;Gene: GDB:1GHG2  
A;Cross-references: GDB:119338; OMIM:147110  
A;Map position: 14q32.33-14q32.33  
C;Complex: An immunoglobulin heterotrimer subunit consists of two identical light (kai  
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into 1  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
C;Keywords: duplication; glycoprotein; heterotrimer; immunoglobulin  
F;20-85/Domain: immunoglobulin homology <IM1>  
F;133-202/Domain: immunoglobulin homology <IM3>  
F;239-306/Domain: immunoglobulin homology <IM3>  
F;14/Disulfide bonds: interchain (to light chain) #status experimental  
F;27-83,140-200,246-304/Disulfide bonds: #status experimental  
F;102,103,106,109/Disulfide bonds: interchain (to heavy chain) #status experimental  
F;176/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 33.2%; Score 1150; DB 1; Length 326;  
Best Local Similarity 68.0%; Pred. No. 3.6e-62;  
Matches 229; Conservative 16; Mismatches 46; Indels 46; Gaps 5;

QY 339 SCCKGSGGPHATHYGTWLTG-----IVSWGQCATVGHFVYTRVSQVI 384  
DB 2 STKGPSVFLPAPCSRSTSESTAALCLVKDYPPEVPTVSNWNGALTSG-----V 50

QY 385 EWLOKLMRSEPRPGVLLRAPPGS---AEPKSCDKTH-----TCPPCP 424  
DB 51 HTFPAVLOSGLYSLSSVTVVPSNFGTQVTCNVHDHPSNTKVDKVERKCCVCP 110

QY 425 APELGGSGVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKENYVDGVEVHNATK 484  
DB 111 APP-VAGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKENYVDGVEVHNATK 169

QY 485 PREEOVNSTYRVSVLTVLHQLDGLNGKEYCKVSNKALPAPIEKTISKAKGPQRPQVY 544  
DB 170 PREEOVNSTYRVSVLTVLHQLDGLNGKEYCKVSNKALPAPIEKTISKAKGPQRPQVY 229

QY 545 LPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGOPENNYKTTPEVLDSGFFLYSKL 604  
DB 230 LPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGOPENNYKTTPEVLDSGFFLYSKL 289

QY 605 TVDKSRWQGNVFCVSMVHEALHNHYTKSLSLSPG 641  
DB 290 TVDKSRWQGNVFCVSMVHEALHNHYTKSLSLSPG 326

RESULT 12  
G4HU  
Ig gamma-4 chain C region - human  
C;Species: Homo sapiens (man)  
C;Date: 02-Apr-1982 #sequence revision 02-Apr-1982 #text\_change 09-Jul-2004  
C;Accession: A90933; A90249; A02150  
R;Ellison, J.; Buxbaum, J.; Hood, L.  
DNA 1, 11-18, 1981  
A;Title: Nucleotide sequence of a human immunoglobulin C-gamma4 gene.  
A;Reference number: A90933; MUID:83157104; PMID:6299662  
A;Accession: A90933  
A;Molecule type: DNA  
A;Residues: 1-327 <ELL>  
A;Cross-references: UNIPROT:P01861  
A;Note: the sequence was determined from the germline gene

R;Pink, J.R.L.; Buttery, S.H.; De Vries, G.M.; Milstein, C.  
Biochem. J. 117, 33-47, 1970  
A;Title: Human immunoglobulin subclasses. Partial amino acid sequence of the constant  
A;Reference number: A90249; MUID:70207560; PMID:4192699  
A;Accession: A90249  
A;Molecule type: protein  
A;Residues: 1-30:81-326 <PIN>  
C;Genetics:  
A;Gene: GDB:IGHG4  
A;Cross-references: GDB:119340; OMIM:147130  
A;Map position: 14q32.33-14q32.33  
A;Introns: 99/1; 111/1; 221/1  
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kappa) chain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into 1a  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
C;Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin  
F;20-85/Domain: immunoglobulin homology <IM1>  
F;99-110/Region: hinge  
F;134-203/Domain: immunoglobulin homology <IM2>  
F;240-307/Domain: immunoglobulin homology <IM3>  
F;14/Disulfide bonds: interchain (to light chain) #status experimental  
F;27-83,141-201,247-305/Disulfide bonds: #status predicted  
F;106,109/Disulfide bonds: interchain (to heavy chain) #status experimental  
F;177/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 33.0%; Score 1142.5; DB 1; Length 327;  
Best Local Similarity 67.7%; Pred. No. 1e-61;  
Matches 228; Conservative 17; Mismatches 47; Indels 45; Gaps 4;

Qy 339 SKGDSGGPHATHYRGTYLTG-----IVSWGQCATVGHGVYTRVSQYI 384  
Db 2 STKGVSFFPLAPCSRSTSESTAALGCLVDFPEFVTVSWNSGALTSG-----V 50  
Qy 385 EWLOKMRSEPRPGVLLRAPPGSA---EPKSCDKTH-----TCPPCP 424  
Db 51 HTPFAVLQSSGLSYLVVTPSSSLGTYTCNVDPKNTKDKRVSKEYGPPCSCP 110  
Qy 425 APELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK 484  
Db 111 APEFLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK 170  
Qy 485 PREEQYNSTRVSVLVTLVHODWLNKGEYKCKVSNKALPAPIEKTISKAKGQPREPQVYT 544  
Db 171 PREEQYNSTRVSVLVTLVHODWLNKGEYKCKVSNKALPAPIEKTISKAKGQPREPQVYT 230  
Qy 545 LPSPRDELTKNOVSLTCLVKGFPSPDIADWESNGQPENNYKTPPPVLDSDGFFLYSKL 604  
Db 231 LPSPQEMTKNOVSLTCLVKGFPSPDIADWESNGQPENNYKTPPPVLDSDGFFLYSKL 290  
Qy 605 TVDKSRWQGNVFCVSCVWHEALHNHYTQKSLSLSPGK 641  
Db 291 TVDKSRWQGNVFCVSCVWHEALHNHYTQKSLSLSPGK 327

RESULT 13  
GHRB  
Ig gamma chain C region - rabbit  
C;Species: Oryctolagus cuniculus (domestic rabbit)  
C;Date: 24-Apr-1984 #sequence revision 15-Nov-1984 #text change 09-Jul-2004  
C;Accession: A91749; A90290; A93928; A90245; A94416; A02161  
R;Bernstein, K.E.; Alexander, C.B.; Mage, R.G.  
Immunogenetics 18, 387-397, 1983  
A;Title: Nucleotide sequence of a rabbit IgG heavy chain from the recombinant F-I haplo  
A;Reference number: A91749; MUID:84030930; PMID:6313520  
A;Accession: A91749  
A;Molecule type: mRNA  
A;Residues: 1-323 <BER>  
A;Cross-references: UNIPROT:P01870  
A;Note: this sequence has the d12 allotypic marker, 104-Thr, and the e14 marker, 185-Thr  
R;Pratt, D.M.; Mole, L.E.  
Biochem. J. 151, 337-349, 1975  
A;Title: Sequence studies on the constant region of the Fd sections of rabbit immunoglob  
A;Reference number: A90290; MUID:76135469; PMID:1243651

A;Accession: A90290  
A;Molecule type: protein  
A;Residues: 1-47,'E',49-71,'PV',72-128 <PRA>  
R;Martens, C.L.; Moore, K.W.; Steinmetz, M.; Hood, L.; Knight, K.L.  
Proc. Natl. Acad. Sci. U.S.A. 79, 6018-6022, 1982  
A;Title: Heavy chain genes of rabbit IgG; isolation of a cDNA encoding gamma heavy chain  
A;Reference number: A93928; MUID:83299917; PMID:6193512  
A;Accession: A93928  
A;Molecule type: mRNA  
A;Residues: 88-103,'M',105-143,'E',145-184,'A',186,'E',188-266 <MAR>  
A;Cross-references: GB:M16426; NID:G165111; PID:AAA31289.1; PID:G165112  
A;Note: this sequence has the d11 allotypic marker, 104-Met, and the e15 allotypic mark  
R;Frutcher, R.G.; Jackson, S.A.; Mole, L.E.; Porter, R.R.  
Biochem. J. 116, 249-255, 1970  
A;Title: Sequence studies of the Fd section of the heavy chain of rabbit immunoglobulin  
A;Reference number: A90245; MUID:70110015; PMID:5461106  
A;Accession: A90245  
A;Molecule type: protein  
A;Residues: 129-131;155-172,'D',174-184,'A',186,'E',188-200,'D',202-217,'E',219-232,'Q'  
R;Hill, R.L.; Lebovitz, H.E.; Fellows Jr., R.E.; Delaney, R.  
in Gamma Globulins, Nobel Symp. 3, Killander, J., ed., pp.109-127, Almqvist and Wiksell  
A;Reference number: A94416  
A;Accession: A94416  
A;Molecule type: protein  
A;Residues: 129-131;155-172,'D',174-184,'A',186,'E',188-200,'D',202-217,'E',219-232,'Q'  
A;Note: this has the e15 allotypic marker, 185-Ala  
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (ka  
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into 1  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
C;Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin  
F;20-82/Domain: immunoglobulin homology <IM1>  
F;130-199/Domain: immunoglobulin homology <IM2>  
F;236-303/Domain: immunoglobulin homology <IM3>  
F;173/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 26.8%; Score 929; DB 1; Length 323;  
Best Local Similarity 53.5%; Pred. No. 7.2e-49;  
Matches 183; Conservative 40; Mismatches 67; Indels 52; Gaps 6;

Qy 318 GDSNPITEVMFCAGYSDGSKDCKSGDGGPHATHYRGTYLTG--IVSWGQCATVGHFG 375  
Db 16 GDTFSSSTVLGCL-----VKG-----YLPFVTVWNSGTLTNG--- 49  
Qy 376 VYTRVSQYIEWLOKMRSEPRPGVLLRAPPGSAEPKSCDKTH-----TC- 420  
Db 50 -----VRTFSPVRQSSGLSYLVVTPSSSLGTYTCNVDPKNTKDKTVPSTCS 101  
Qy 421 -PPCPAPPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH 479  
Db 102 KPTCPPELGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH 161  
Qy 480 NAKTKPREQYNSTRVSVLVTLVHODWLNKGEYKCKVSNKALPAPIEKTISKAKGQPRE 539  
Db 162 TARPPLREQYNSTRVSVLVTLVHODWLNKGEYKCKVSNKALPAPIEKTISKAKGQPRE 221  
Qy 540 PQVYTLPPSRDELTKNOVSLTCLVKGFPSPDIADWESNGQPENNYKTPPPVLDSDGSGFF 599  
Db 222 PKVYTWGPPREELSSRSVSLTCMNGFYPSPDISVEWEKNGKAEDNYKTTTPVLDSDGSGYF 281  
Qy 600 LYSKLTVDKSRWQGNVFCVSCVWHEALHNHYTQKSLSLSPGK 641  
Db 282 LYNKLSVPTSEWQRGDVFCTVMHEALHNHYTQKSISRSPGK 323

RESULT 14  
I47160  
Ig gamma 2b chain constant region - pig (fragment)  
C;Species: Sus scrofa domestica (domestic pig)  
C;Date: 21-Feb-1997 #sequence\_revision 21-Feb-1997 #text\_change 21-Jan-2000  
C;Accession: I47160  
R;Kacskovics, I.; Sun, J.; Butler, J.E.  
J. Immunol. 153, 3565-3573, 1994  
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a

A;Reference number: I47158; MUID:95015845; PMID:7930579  
A;Accession: I47160  
A;Status: preliminary; translated from GB/EMBL/DBJ  
A;Molecule type: mRNA  
A;Residues: 1-328 <KAC>  
A;Cross-references: EMBL:U03780; NID:g433125; PIDN:AAA52218.1; PID:g433126  
C;Genetics:  
A;Gene: Igg2b  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
F;133-202/Domain: immunoglobulin homology <IMM>

Query Match 26.4%; Score 914.5; DB 2; Length 328;  
Best Local Similarity 54.5%; Pred. No. 5.4e-48;  
Matches 183; Conservative 42; Mismatches 56; Indels 55; Gaps 8;

Qy 340 CKDGGGPH-----ATHYRGTYLTVLGIYVSWGQCATVG-----HFGVYTRVSQYI 384  
Db 14 CGRDTSGPNVALGCLASSY---PPEPVTVTWNSGALTSVHTFPSPVLQPSGLYSLSS--- 67

Qy 385 EWLQKLMRSEPRPGVLLRAPFGSAEPKSCDKTH-----TCPPCPAPE 427  
Db 68 -----MVTVPASSL-----SSKSYTCNVNHPATTTKDKRVGTKTKPPCPICPACE 113

Qy 428 LLGGPSVFLPPPKPDKTLMISRTPEVTCVVVDVSHEDPEVKENWYVDGVEVHNAKTKPRE 487  
Db 114 -SPGPSVFIIPPCKDTLMISRTPEVTCVVVDVSHEDPEVQSWYVDGVEVHTAQTTPKE 172

Qy 488 EQNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP 547  
Db 173 EQFNSTYRVVSVLPIQHQLWNGKEFKCKVNNKDLPAITRIISKAKGQTRPQVYTLPP 232

Qy 548 SRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQ--PENNYKTTTPPVLDSDGSPFLYSKLT 605  
Db 233 HAEELSRKSVISITCLVIGFYPPDIDVEWQNGQPEPEGNVYRTTPQQDVGDTGYFLYSKFS 292

Qy 606 VDKSRWQOGNVFSCSVNMEALHNNHYTKSLSLSPGK 641  
Db 293 VDKASWQGGGIFQCAVMHEALHNNHYTKSISKTPGK 328

RESULT 15  
I47159  
Ig gamma 2a chain constant region - pig (fragment)  
C;Species: Sus scrofa domestica (domestic pig)  
C;Date: 21-Feb-1997 #sequence revision 21-Feb-1997 #text\_change 21-Jan-2000  
C;Accession: I47159  
J. Immunol. 153, 3565-3573, 1994  
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a  
A;Reference number: I47158; MUID:95015845; PMID:7930579  
A;Accession: I47159  
A;Status: preliminary; translated from GB/EMBL/DBJ  
A;Molecule type: mRNA  
A;Residues: 1-328 <KAC>  
A;Cross-references: EMBL:U03779; NID:g433123; PIDN:AAA52217.1; PID:g433124  
C;Genetics:  
A;Gene: Igg2a  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
F;133-202/Domain: immunoglobulin homology <IMM>

Query Match 26.3%; Score 912.5; DB 2; Length 328;  
Best Local Similarity 54.2%; Pred. No. 7.2e-48;  
Matches 182; Conservative 43; Mismatches 56; Indels 55; Gaps 8;

Qy 340 CKDGGGPH-----ATHYRGTYLTVLGIYVSWGQCATVG-----HFGVYTRVSQYI 384  
Db 14 CSRDTSGPNVALGCLASSY---PPEPVTVTWNSGALSSGVHTFPSPVLQPSGLYSLSS--- 67

Qy 385 EWLQKLMRSEPRPGVLLRAPFGSAEPKSCDKTH-----TCPPCPAPE 427  
Db 68 -----MVTVPASSL-----SSKSYTCNVNHPATTTKDKRVGTKTKPPCPICPACE 113

Qy 428 LLGGPSVFLPPPKPDKTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPRE 487



FT	Modified-site	/note= "4-carboxy glutamic acid"	
FT	35	/label= GLA	
FT	Protein	/note= "4-carboxy glutamic acid"	
FT	407..641		
FT	/note= "IgG1 Fc domain"		
XX	WO2004006962-A2.		
XX	22-JAN-2004.		
XX	09-JUL-2003; 2003WO-DK000481.		
XX	12-JUL-2002; 2002DK-00001099.		
XX	(NOVO ) NOVO NORDISK AS.		
PI	Bjorn SE, Nicolaisen EM, Steenstrup TD;		
XX	WPI; 2004-180224/17.		
XX	New compound binding to tissue factor, useful for treating diseases such		
PT	as angiogenesis, ischemia/reperfusion, and rheumatoid arthritis.		
XX	Claim 17; SEQ ID NO 8; 61pp; English.		
XX	The invention relates to a compound (I) binding to tissue factor (TF).		
CC	The compound (I) has the formula A-(LM)-C, where A is a FVIIa		
CC	polypeptide, LM is an optional linker group, C comprises an		
CC	immunostimulatory effector domain, and (I) binds to TF. (I) inhibits TF-		
CC	mediated activated factor VII (FVIIa) activity. (I) is useful as a		
CC	medicament, and for the manufacture of a medicament for preventing or		
CC	treating disease or disorder associated with pathophysiological TF		
CC	activity. The disease or disorder associated with pathophysiological TF		
CC	activity are deep venous thrombosis, arterial thrombosis, post surgical		
CC	thrombosis, coronary artery bypass graft (CABG), percutaneous transluminal		
CC	coronary angioplasty (PTCA), stroke, cancer, tumor metastasis,		
CC	angiogenesis, ischemia/reperfusion, rheumatoid arthritis, thrombolysis,		
CC	arteriosclerosis and restenosis following angioplasty, acute and chronic		
CC	indications such as inflammation, septic shock, septicemia, hypotension,		
CC	adult respiratory distress syndrome (ARDS), disseminated intravascular		
CC	coagulopathy (DIC), pulmonary embolism, platelet deposition, myocardial		
CC	infarction, or prophylactic treatment of mammals with atherosclerotic		
CC	vessels at risk for thrombosis. The present sequence represents a native		
CC	human coagulation Factor VII conjugated to Fc domain of immunoglobulin G1		
CC	(IgG1)		
XX	Sequence 641 AA;		
SQ	Query Match	100.0%; Score 3464; DB 8; Length 641;	
	Best Local Similarity	100.0%; Pred. No. 2.9e-166;	
	Matches 641; Conservative	0; Mismatches 0; Indels 0; Gaps 0;	
QY	1	ANAFLLXRLPGSLRXKXQXQXFXRXIFKDAKTKLFWISYSDGQACSSPCQNGS 60	
DB	1	ANAFLLXRLPGSLRXKXQXQXFXRXIFKDAKTKLFWISYSDGQACSSPCQNGS 60	
QY	61	CKDQLOSYICFCPLPAPEAGNRCETHKDDQLICVNENGSCFQYCSDHGTGRKRCHEGYSL 120	
DB	61	CKDQLOSYICFCPLPAPEAGNRCETHKDDQLICVNENGSCFQYCSDHGTGRKRCHEGYSL 120	
QY	121	LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGECQWQVLLLVNGAQLCGG 180	
DB	121	LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGECQWQVLLLVNGAQLCGG 180	
QY	181	TLINTIIVWVSAHCFDKIKNWRNLIAVLGEHDLSEHDGEQRRVAQVIIPSTYVPGTTN 240	
DB	181	TLINTIIVWVSAHCFDKIKNWRNLIAVLGEHDLSEHDGEQRRVAQVIIPSTYVPGTTN 240	
QY	241	HDIALRLHQPVVLTTHVVPCLPPTFTSERTLAFVRFSLVSGWGLDRGATALEMVL 300	
DB	241	HDIALRLHQPVVLTTHVVPCLPPTFTSERTLAFVRFSLVSGWGLDRGATALEMVL 300	
QY	301	NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDSCKGSDGGPHATHYRGTWYLTG 360	
DB	301	NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDSCKGSDGGPHATHYRGTWYLTG 360	
QY	361	IVSWGQCATVGHFGVYTRVSQYIEWLQKLMRSEPRGVLRLRAPFPGSAEPKSCDKTHTC 420	
DB	361	IVSWGQCATVGHFGVYTRVSQYIEWLQKLMRSEPRGVLRLRAPFPGSAEPKSCDKTHTC 420	
QY	421	PPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 480	
DB	421	PPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 480	
QY	481	AKTKPREQYNSTYRVVSVLTVLHQDLNGLKEVKCKVSNKALPAPTEKTIISKAKGQPREP 540	
DB	481	AKTKPREQYNSTYRVVSVLTVLHQDLNGLKEVKCKVSNKALPAPTEKTIISKAKGQPREP 540	
QY	541	QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFL 600	
DB	541	QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFL 600	
QY	601	YSKLTVDKSRWQOGNPFVSCVMHEALHNHYTQKSLSLSPGK 641	
DB	601	YSKLTVDKSRWQOGNPFVSCVMHEALHNHYTQKSLSLSPGK 641	
XX	RESULT 2		
XX	ADJ57516		
ID	ADJ57516 standard; protein; 679 AA.		
XX	ADJ57516;		
DT	06-MAY-2004 (first entry)		
DE	Human FVII-IgG1 Fc domain fusion protein.		
KW	TF; tissue factor; FVIIa; factor VII; anticoagulant; thrombolytic;		
KW	cerebroprotective; cytostatic; vasotonic; antirheumatic; antiarthritic;		
KW	antiartherosclerotic; antiinflammatory; antibacterial; immunosuppressive;		
KW	hypertensive; cardiac; human; coagulation Factor VII; immunoglobulin G1;		
XX	IgG1; fusion protein.		
OS	Homo sapiens.		
XX	Synthetic.		
EH	Key	Location/Qualifiers	
FT	Peptide	1..38	
FT	Protein	/note= "alternatively spliced propeptide"	
FT	Misc-difference 379	39..444	
FT	Protein	/note= "human coagulation factor VII"	
FT	Protein	445..679	
FT	Protein	/note= "IgG1 Fc domain"	
XX	WO2004006962-A2.		
XX	22-JAN-2004.		
XX	09-JUL-2003; 2003WO-DK000481.		
XX	12-JUL-2002; 2002DK-00001099.		
XX	(NOVO ) NOVO NORDISK AS.		
PI	Bjorn SE, Nicolaisen EM, Steenstrup TD;		
XX	WPI; 2004-180224/17.		
DR	N-PSDB; ADJ57517, ADJ57518.		
XX	New compound binding to tissue factor, useful for treating diseases such		
PT	as angiogenesis, ischemia/reperfusion, and rheumatoid arthritis.		
XX	Example 1; SEQ ID NO 11; 61pp; English.		



Best Local Similarity 98.4%; Pred. No. 3.1e-166;		Matches 631; Conservative 10; Mismatches 0; Indels 0; Gaps 0;	
QY	1	ANAFLLXLRPGSLRXKXCKXQCSFFXARXIFKDAERTKLFWISYSDGDCASSPCQNGS	60
DB	61	ANAFLEELRPGSLRECKEEOCSFEAREIFKDAERTKLFWISYSDGDCASSPCQNGS	120
QY	61	CKDQLOSYICFCCLPAFEGNRCETHKDDQLICVNENGCEQYCSDHGTGKRSRCHEGYSL	120
DB	121	CKDQLOSYICFCCLPAFEGNRCETHKDDQLICVNENGCEQYCSDHGTGKRSRCHEGYSL	180
QY	121	LADGVSTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGECMPQVLLLVNQAQLCGG	180
DB	181	LADGVSTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGECMPQVLLLVNQAQLCGG	240
QY	181	TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDGEOQRRVAQVLIIPSTYVPGTTN	240
DB	241	TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDGEOQRRVAQVLIIPSTYVPGTTN	300
QY	241	HDIALRLHQPVLVTDHVVPLCLPERTFSERTLAFVRFSLVSGWGLDRGATALELMVL	300
DB	301	HDIALRLHQPVLVTDHVVPLCLPERTFSERTLAFVRFSLVSGWGLDRGATALELMVL	360
QY	301	NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKGDSGGPHATHYRGTYWLTG	360
DB	361	NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKGDSGGPHATHYRGTYWLTG	420
QY	361	IYSWGOGCATVGHFGYTVTVSQVIEWLQKLMRSEPRGVLLRAPFSGSAEPKSCDKTHTC	420
DB	421	IYSWGOGCATVGHFGYTVTVSQVIEWLQKLMRSEPRGVLLRAPFSGSAEPKSCDKTHTC	480
QY	421	PPCPAPPELLGGPSVFLFPKPKDMLISRTPEVTCVVDVSHEDPVEKFNWYVDGVEVHN	480
DB	481	PPCPAPPELLGGPSVFLFPKPKDMLISRTPEVTCVVDVSHEDPVEKFNWYVDGVEVHN	540
QY	481	AKTKPREEQNSTYRVSVVLTVLHODWLNKGYKCKVSNKALPAPIEKTISKAKGQPREP	540
DB	541	AKTKPREEQNSTYRVSVVLTVLHODWLNKGYKCKVSNKALPAPIEKTISKAKGQPREP	600
QY	541	QVYTLSPSDELTKNQVSLTCLVKGYFPEVDIAVEWESNGQPENNYKTTPVLDSDGSFEL	600
DB	601	QVYTLSPSDELTKNQVSLTCLVKGYFPEVDIAVEWESNGQPENNYKTTPVLDSDGSFEL	660
QY	601	YSKLTVDKRWQGNVFCVSMHEALHNNHYTKLSLSLSPGK 641	
DB	661	YSKLTVDKRWQGNVFCVSMHEALHNNHYTKLSLSLSPGK 701	
RESULT 4			
ID	AAR35764	AAR35764	
XX	AAR35764	standard; protein; 406 AA.	
AC	AAR35764;		
XX			
DT	25-MAR-2003 (revised)		
DT	24-SEP-1993 (first entry)		
XX			
DE	Factor VII (VII).		
XX			
KW	PC; protein C; IX; Factor IX; X; Factor X; PT; prothrombin; VII;		
KW	Factor VII; CT; chymotrypsinogen; SP; serine protease; binding; exosite;		
KW	catalytic activity.		
XX			
OS	Homo sapiens.		
XX			
FH	Key	Location/Qualifiers	
FT	Region	1..152	
FT		/note= "Factor VII light chain"	
FT	Region	153..406	
FT		/note= "Factor VII heavy chain"	
FT	Peptide	245..266	
FT		/note= "Claim 9, page 138-139 describes an antibody that reacts with Factor VII; fragments 289-304, 290-291"	

FT	Peptide	310, 374-388 and 400-414 but not with fragment 245-266"
FT		289..304
FT	Peptide	/note= "pref. PC polypeptide; claim 4, page 137"
FT		290..310
FT	Peptide	/note= "exosite 2"
FT		290..310
FT	Peptide	/note= "pref. PC polypeptide; claim 2, page 136"
FT		290..304
FT	Peptide	/note= "pref. PC polypeptide; claim 4, page 137"
FT		374..388
FT	Peptide	/note= "exosite 1"
FT		374..388
FT	Peptide	/note= "pref. PC polypeptide; claim 2, page 136"
XX		WO9309804-A1.
XX		27-MAY-1993.
XX		18-NOV-1992; 92WO-US010242.
XX		18-NOV-1991; 91US-00793989.
XX		(SCRI ) SCRIPES RES INST.
XX		Griffin JH, Mesters RM;
XX		WPI; 1993-182244/22.
XX		Serine protease derived-polypeptide(s) and anti-peptide antibodies - for inhibiting coagulation and assaying for the presence of serine protease in fluid samples.
XX		Disclosure; Page 133-135; 149pp; English.
XX		The PC polypeptides indicated in the Features Table inhibit coagulation (they prevent binding of serine protease to natural substrates), esp. when admin. to give an intravascular blood concn. of 0.1-100 (pref. 0.5-10) microm. NB: Sequences corresp. to SEQ ID NO 6, 7, 8 and 9 are described in the specification but have not yet been added to the CC SEQUENCE LISTING. (Updated on 25-MAR-2003 to correct FN field.)
XX		Sequence 406 AA;
QY	Query Match	63.1%; Score 2187; DB 2; Length 406;
DB	Best Local Similarity	97.5%; Pred. No. 2.8e-102;
DB	Matches	396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;
QY	1	ANAFLLXLRPGSLRXKXCKXQCSFFXARXIFKDAERTKLFWISYSDGDCASSPCQNGS 60
DB	1	ANAFLEELRPGSLRECKEEOCSFEAREIFKDAERTKLFWISYSDGDCASSPCQNGS 60
QY	61	CKDQLOSYICFCCLPAFEGNRCETHKDDQLICVNENGCEQYCSDHGTGKRSRCHEGYSL 120
DB	61	CKDQLOSYICFCCLPAFEGNRCETHKDDQLICVNENGCEQYCSDHGTGKRSRCHEGYSL 120
QY	121	LADGVSTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGECMPQVLLLVNQAQLCGG 180
DB	121	LADGVSTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGECMPQVLLLVNQAQLCGG 180
QY	181	TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDGEOQRRVAQVLIIPSTYVPGTTN 240
DB	181	TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDGEOQRRVAQVLIIPSTYVPGTTN 240
QY	241	HDIALRLHQPVLVTDHVVPLCLPERTFSERTLAFVRFSLVSGWGLDRGATALELMVL 300
DB	241	HDIALRLHQPVLVTDHVVPLCLPERTFSERTLAFVRFSLVSGWGLDRGATALELMVL 300
QY	301	NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKGDSGGPHATHYRGTYWLTG 360
DB	301	NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKGDSGGPHATHYRGTYWLTG 360
QY	361	IYSWGOGCATVGHFGYTVTVSQVIEWLQKLMRSEPRGVLLRAPFSGSAEPKSCDKTHTC 406

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Db 361 IVSWGQCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
RESULT 5
AAB84866
ID AAB84866 standard; protein; 406 AA.
XX
AC AAB84866;
XX
DT 31-JUL-2001 (first entry)
XX
DE Wild-type human blood coagulant factor VII (FVII).
XX
KW Human; haemostatic; blood coagulant factor VII; FVII; haemophilia.
XX
OS Homo sapiens.
XX
PH Key Location/Qualifiers
FT Disulfide-bond 159..164
XX
PN JP2001061479-A.
XX
PD 13-MAR-2001.
XX
PF 24-AUG-1999; 99JP-00237610.
XX
PR 24-AUG-1999; 99JP-00237610.
XX
PA (KAGA ) ZH KAGAKU & KESSEI RYOHO KENKYUSHO.
XX
DR WPI; 2001-310677/33.
DR N-PSDB; AAH19459.
XX
PT Mutant of blood coagulant factor VII, used for substitution therapy in
the treatment of hemophilia.
XX
PS Disclosure; Page 8-9; 29pp; Japanese.
XX
CC The present invention relates to mutants of blood coagulant factor VII
(FVII) or activated blood coagulant factor VII (FVIIa). The present
sequence represents the protein sequence for wild-type human FVII. The
mutants can be used as an agent for the substitution therapy of
CC haemophilia inhibitor patients
XX
SQ Sequence 406 AA;

Query Match 63.1%; Score 2187; DB 4; Length 406;
Best Local Similarity 97.5%; Pred. No. 2.8e-102;
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

QY 1 ANAFLLXRLPGSLKRXCKXQCFXAXRIFKDAKRTKLFWISYDGDQACASSPCQNGGS 60
DB 1 ANAFLELRPGSLERECKEKCQCFEAREIFKDAERTKLFWISYDGDQACASSPCQNGGS 60
QY 61 CKDQLOSYICFCLPAFEGNRCETHKDDQLICVNEGCGEQYCSDDHTGTRKSCRCHEGYSL 120
DB 61 CKDQLOSYICFCLPAFEGNRCETHKDDQLICVNEGCGEQYCSDDHTGTRKSCRCHEGYSL 120
QY 121 LADGVSTPTVEVPCGKIPILEKRNASKPQGRIVGGKVCPCGCPQVLLVNGAQLCGG 180
DB 121 LADGVSTPTVEVPCGKIPILEKRNASKPQGRIVGGKVCPCGCPQVLLVNGAQLCGG 180
QY 181 TLINTIIVWSAAHCFDKIKNWRNLIAVLGEHDLSEHGDGDSQSRRAQVILPSTYVPGTTN 240
DB 181 TLINTIIVWSAAHCFDKIKNWRNLIAVLGEHDLSEHGDGDSQSRRAQVILPSTYVPGTTN 240
QY 241 HDIALLRLHPVVLTDHVPCLLPERTFSTRTIAFVRFSLVSGWGLDRGATALEMLVL 300
DB 241 HDIALLRLHPVVLTDHVPCLLPERTFSTRTIAFVRFSLVSGWGLDRGATALEMLVL 300
QY 301 NVPLMTQDCLQSRKVGDSFNITEYMFACAGYSDGSKDSCKGSGGPHATHYRGTYLTCG 360
DB 301 NVPLMTQDCLQSRKVGDSFNITEYMFACAGYSDGSKDSCKGSGGPHATHYRGTYLTCG 360

QY 361 IVSWGQCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
DB 361 IVSWGQCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406

RESULT 6
AAM52172
ID AAM52172 standard; protein; 406 AA.
XX
AC AAM52172;
XX
DT 07-FEB-2002 (first entry)
XX
DE Mammalian expressed human FVII SEQ ID NO 3.
XX
KW Factor VII; FVII; Factor VIIa; FVIIa; haemostatic; thrombolytic;
cardiant; hepatotrophic; cerebroprotective; haemophilia; liver disease;
myocardial infarction; thrombotic stroke; deep-vein thrombosis.
XX
OS Homo sapiens.
XX
PH Key Location/Qualifiers
FT Modified-site 52 /note= "O-glycosylated"
FT Modified-site 60 /note= "O-glycosylated"
FT Modified-site 145 /note= "N-glycosylated"
FT Cleavage-site 152..153 /note= "proteolytic cleavage site converting FVII zymogen
to an activated form, comprising two chains linked by a
single disulphide bridge"
FT Modified-site 322 /note= "N-glycosylated"
XX
PN WO200158935-A2.
XX
PD 16-AUG-2001.
XX
PF 12-FEB-2001; 2001WO-DK0000094.
XX
PR 11-FEB-2000; 2000DK-00000218.
PR 18-OCT-2000; 2000DK-00001558.
XX
PA (MAXY-) MAXYGEN APS.
XX
PI Andersen KV, Pedersen AH, Bornaes C;
XX
DR WPI; 2001-581807/65.
DR N-PSDB; AAI99983.
XX
PT New conjugate, useful for treating Factor VIIa related diseases or
disorders such as hemophilia, liver disease, myocardial infarction and
deep-vein thrombosis, comprises non-polypeptide group covalently attached
to polypeptide group.
XX
PS Disclosure; Page 85-86; 89pp; English.
XX
CC The invention relates to novel Factor VII (FVII) or Factor VIIa (FVIIa)
polypeptide conjugates, comprising at least one non-polypeptide group
covalently attached to a polypeptide, where the amino acid sequence of
polypeptide differs from that of the wildtype FVIIa (AAM52171) in that at
least one amino acid residue containing an attachment group for the non-
polypeptide group has been introduced or removed. The FVIIa conjugates
have haemostatic, thrombolytic, cardiant, hepatotrophic and
cerebroprotective activity and are useful for treating FVIIa/FII-related
diseases or disorders such as haemophilia, liver disease, myocardial
infarction, thrombotic stroke and deep-vein thrombosis. The conjugates
have increased functional in vivo half life and/or increased plasma half
life, increased bioavailability and or reduced sensitivity to proteolytic
degradation. Consequently medical treatment using the conjugates has a
number of advantages over currently available such as longer duration
```



QY 61 CKDQLQSYICFCCLPAPEGRNCETHKDDQLICVNENGGCEQYCSDHGTGTRKSCRCHEGYSL 120  
DB 61 CKDQLQSYICFCCLPAPEGRNCETHKDDQLICVNENGGCEQYCSDHGTGTRKSCRCHEGYSL 120  
QY 121 LADGVSTPTVEYPCGKIPILEKRNASKPGRIVGGKVCPCPGKCPQVLLLVNQAOLCGG 180  
DB 121 LADGVSTPTVEYPCGKIPILEKRNASKPGRIVGGKVCPCPGKCPQVLLLVNQAOLCGG 180  
QY 181 TLINTIWWVSAAHCFDKIKNWRNLIAVLGEHDLSEHGDGQSRRAQVIIPSTVYVPGTTN 240  
DB 181 TLINTIWWVSAAHCFDKIKNWRNLIAVLGEHDLSEHGDGQSRRAQVIIPSTVYVPGTTN 240  
QY 241 HDIALRLHQPVLVTHVVPCLPPTFSERTIAFVRFSILVSGWQLLDRGATALELMVL 300  
DB 241 HDIALRLHQPVLVTHVVPCLPPTFSERTIAFVRFSILVSGWQLLDRGATALELMVL 300  
QY 301 NVPRMTQDCLQOSRKVGDSPNITEYMFCAYSKDGSKDCKGSGGPHATHYRGTYLGTG 360  
DB 301 NVPRMTQDCLQOSRKVGDSPNITEYMFCAYSKDGSKDCKGSGGPHATHYRGTYLGTG 360  
QY 361 IVSWGQGCATVGHFGYVYTRVSQYIEWLQKLMRSEPRGVLLRAPFP 406  
DB 361 IVSWGQGCATVGHFGYVYTRVSQYIEWLQKLMRSEPRGVLLRAPFP 406

RESULT 8

AAU77188  
ID AAU77188 standard; protein; 406 AA.

XX AC AAU77188;

XX DT 15-JUL-2002 (first entry)

XX DE Human coagulation Factor VII protein.  
XX KW Human; coagulation factor VII; haemostatic; bleeding disorder;  
XX KW clotting factor deficiency; haemophilia; defective platelet function;  
XX KW thrombocytopenia; von Willebrand's disease; tissue factor.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers  
FT Domain 1. .37  
FT Modified-site 6 /note= "N-terminal GLA-domain"  
FT Modified-site 7 /note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"  
FT Modified-site 14 /note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"  
FT Modified-site 16 /note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"  
FT Modified-site 19 /note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"  
FT Modified-site 20 /note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"  
FT Modified-site 25 /note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"  
FT Modified-site 26 /note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"  
FT Modified-site 29 /note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"  
FT Modified-site 35 /note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"  
FT Domain 153. .406  
FT /note= "Protease domain"

XX PN WO200222776-A2.

XX PD 21-MAR-2002.

XX PF 13-SEP-2001; 2001WO-DK000596.

XX

PR 13-SEP-2000; 2000DK-00001361.  
PR 29-SEP-2000; 2000US-0236455P.  
XX PA (NOVO ) NOVO NORDISK AS.  
XX PI Persson E, Olsen OH;  
XX DR WPI; 2002-351879/38.  
XX XX  
XX PT New human coagulation factor VII variants having coagulant activity,  
XX PT useful for treatment or prophylaxis of bleeding disorders in a subject or  
XX PT for enhancing normal hemostatic system.

XX PS Claim 1; Fig 1; 64pp; English.

XX CC The invention relates to the human coagulation Factor VII polypeptide and  
XX CC variants of the amino acid sequence. The protein of the invention is  
XX CC useful for preparing for medicament for treating a bleeding episode or  
XX CC for the enhancement of the normal haemostatic system. The protein is  
XX CC useful for treatment of bleeding disorders in a subject or for the  
XX CC enhancement of the normal haemostatic system. The factor VII variants may  
XX CC be used to control bleeding disorders which have several causes such as  
XX CC clotting factor deficiencies (e.g., haemophilia A and B or deficiency of  
XX CC coagulation factors XI or VII) or clotting factor inhibitors, or they may  
XX CC be used to control excessive bleeding occurring in subjects with a  
XX CC normally functioning blood clotting cascade (no clotting factor  
XX CC deficiencies or inhibitors against any of the coagulation factors). The  
XX CC bleedings may be caused by a defective platelet function,  
XX CC thrombocytopenia or von Willebrand's disease. Factor VIIa variants  
XX CC exhibit an inherent activity which may be therapeutically useful in  
XX CC situations where the procoagulant activity is independent of tissue  
XX CC factor. This sequence represents the human coagulation factor VII  
XX CC polypeptide

XX SQ Sequence 406 AA;

Query Match 63.1%; Score 2187; DB 5; Length 406;  
Best Local Similarity 100.0%; Pred. No. 2.8e-102;  
Matches 406; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ANAFLXLRPGSLRXCKXQCSFXXARXIFKDXATKLFWSYSDGDCASSPCQNGS 60  
DB 1 ANAFLXLRPGSLRXCKXQCSFXXARXIFKDXATKLFWSYSDGDCASSPCQNGS 60  
QY 61 CKDQLQSYICFCCLPAPEGRNCETHKDDQLICVNENGGCEQYCSDHGTGTRKSCRCHEGYSL 120  
DB 61 CKDQLQSYICFCCLPAPEGRNCETHKDDQLICVNENGGCEQYCSDHGTGTRKSCRCHEGYSL 120  
QY 121 LADGVSTPTVEYPCGKIPILEKRNASKPGRIVGGKVCPCPGKCPQVLLLVNQAOLCGG 180  
DB 121 LADGVSTPTVEYPCGKIPILEKRNASKPGRIVGGKVCPCPGKCPQVLLLVNQAOLCGG 180  
QY 181 TLINTIWWVSAAHCFDKIKNWRNLIAVLGEHDLSEHGDGQSRRAQVIIPSTVYVPGTTN 240  
DB 181 TLINTIWWVSAAHCFDKIKNWRNLIAVLGEHDLSEHGDGQSRRAQVIIPSTVYVPGTTN 240  
QY 241 HDIALRLHQPVLVTHVVPCLPPTFSERTIAFVRFSILVSGWQLLDRGATALELMVL 300  
DB 241 HDIALRLHQPVLVTHVVPCLPPTFSERTIAFVRFSILVSGWQLLDRGATALELMVL 300  
QY 301 NVPRMTQDCLQOSRKVGDSPNITEYMFCAYSKDGSKDCKGSGGPHATHYRGTYLGTG 360  
DB 301 NVPRMTQDCLQOSRKVGDSPNITEYMFCAYSKDGSKDCKGSGGPHATHYRGTYLGTG 360  
QY 361 IVSWGQGCATVGHFGYVYTRVSQYIEWLQKLMRSEPRGVLLRAPFP 406  
DB 361 IVSWGQGCATVGHFGYVYTRVSQYIEWLQKLMRSEPRGVLLRAPFP 406

RESULT 9

ABG31688  
ID ABG31688 standard; peptide; 406 AA.

XX



FT Modified-site 25 /note= "gamma-carboxyglutamate"  
FT Modified-site 26 /note= "gamma-carboxyglutamate"  
FT Modified-site 29 /note= "gamma-carboxyglutamate"  
FT Modified-site 35 /note= "gamma-carboxyglutamate"  
FT Modified-site 35 /note= "gamma-carboxyglutamate"  
XX  
PN WO200182943-A2.  
XX  
XX 08-NOV-2001.  
XX  
XX 03-MAY-2001; 2001WO-DK000302.  
XX  
XX 03-MAY-2000; 2000DK-00000734.  
PR 13-SEP-2000; 2000DK-00001360.  
PR 13-SEP-2000; 2000DK-00001361.  
PR 22-MAR-2001; 2001DK-00000477.  
XX  
XX (NOVO ) NOVO NORDISK AS.  
XX  
XX Johannesen M, Nordfang OJ, Jansen JA;  
PI  
XX  
DR WPI; 2002-055422/07.  
XX  
XX Use of Factor VIIa in the manufacture of a medicament for treating a  
PT condition affectable by Factor VIIa.  
PT  
XX  
XX Disclosure; Fig 3; 26pp; English.  
XX  
XX The present sequence represents an amino acid sequence of native human  
CC coagulation Factor VII. The present invention describes a Factor VIIa  
CC which is used in the manufacture of a medicament for treating a condition  
CC affectable by Factor VIIa. Factor VIIa can be used for the manufacture of  
CC a medicament for treating a condition affectable by Factor VIIa such as  
CC bleeding caused by lack of or defective coagulation Factors VIII, IX or  
CC VII or inhibitors against coagulation Factors VIII, IX or VII, bleeding  
CC caused by a defective platelet function, bleeding associated with  
CC excessive tissue damage or trauma, to control bleeding disorders caused  
CC by clotting factor deficiencies (haemophilia A and B) or clotting factor  
CC inhibitors or bleeding disorders in patients suffering from von  
CC Willbrand's diseases, in situations such as diffuse bleeding, in  
CC haemorrhagic gastritis and profuse uterine bleeding, for the treatment of  
CC bleeding in brain, inner ear region, eyes as well as in association with  
CC the process of taking biopsies from various organs and in laproscopic  
CC surgery in mammals, preferably human beings  
XX  
XX Sequence 406 AA;  
S  
Query Match 63.1%; Score 2187; DB 5; Length 406;  
Best Local Similarity 97.5%; Pred. No. 2.8e-102;  
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ANAFLLXRLRPSLXRXCKXQCXFXARXIFKDAERTKLFWSYSDGDCASSPCQNGGS 60  
DB 1 ANAFLEELRPSGLERECKEQCFEAREIFKDAERTKLFWSYSDGDCASSPCQNGGS 60  
QY 61 CKDQLQSYICFCLPAPFGRNCETHKDDQLICVNEGGCEQYCDHTGTRKSCRCHEGYSL 120  
DB 61 CKDQLQSYICFCLPAPFGRNCETHKDDQLICVNEGGCEQYCDHTGTRKSCRCHEGYSL 120  
QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPOGRIVGGKVCPCGCPMQLLVNQAOLCGG 180  
DB 121 LADGVSCPTVEYPCGKIPILEKRNASKPOGRIVGGKVCPCGCPMQLLVNQAOLCGG 180  
QY 181 TLINTIWWSAHCFDKIKWRNLIAVLGEHDLSEHGDQSRRAVQVIIPSTVPGTTN 240  
DB 181 TLINTIWWSAHCFDKIKWRNLIAVLGEHDLSEHGDQSRRAVQVIIPSTVPGTTN 240  
QY 241 HDIALLRLHQFVVLTDHVPCLPFTFSTERTLAFVRFSLVSGWGLLDGATALEMLVL 300  
DB 241 HDIALLRLHQFVVLTDHVPCLPFTFSTERTLAFVRFSLVSGWGLLDGATALEMLVL 300

OY 301 NVPRMLTQCLQSRKVGDSNITEYMFCAVYSDGSKDCKGSGGPHATHYRGTYWLTG 360  
DB 301 NVPRMLTQCLQSRKVGDSNITEYMFCAVYSDGSKDCKGSGGPHATHYRGTYWLTG 360  
QY 361 IVSWGOGCATVGHFVYTVSVQVIEWLQKLMESEPRPGVLLRAPPP 406  
DB 361 IVSWGOGCATVGHFVYTVSVQVIEWLQKLMESEPRPGVLLRAPPP 406

## RESULT 11

ABB80051

ID ABB80051 standard; protein; 406 AA.

XX

AC ABB80051;

XX

DT 27-AUG-2002 (first entry)

XX

DE Human coagulation factor VII wild-type amino acid sequence.

XX

KW Human; coagulation factor VII; coagulant; haemostatic; bleeding;  
KW prophylactic; clotting factor deficiency; haemophilia;  
KW coagulation factor XI; platelet; thrombocytopaenia; uterine bleeding;  
KW von Willebrand's disease; laproscopic surgery; haemorrhagic gastritis.

XX

OS Homo sapiens.

XX

XX Key

XX Domain

FT

FT Location/Qualifiers

FT 1..37

FT /label= N-terminal GLA domain

FT /note= "GLA is gamma-carboxyglutaminc acid"

FT Modified-site 6

FT /note= "gamma-carboxyglutamic acid"

FT Modified-site 7

FT /note= "gamma-carboxyglutamic acid"

FT Modified-site 14

FT /note= "gamma-carboxyglutamic acid"

FT Modified-site 16

FT /note= "gamma-carboxyglutamic acid"

FT Modified-site 19

FT /note= "gamma-carboxyglutamic acid"

FT Modified-site 20

FT /note= "gamma-carboxyglutamic acid"

FT Modified-site 25

FT /note= "gamma-carboxyglutamic acid"

FT Modified-site 26

FT /note= "gamma-carboxyglutamic acid"

FT Modified-site 29

FT /note= "gamma-carboxyglutamic acid"

FT Modified-site 35

FT /note= "gamma-carboxyglutamic acid"

XX

XX WO200183725-A1.

XX

XX 08-NOV-2001.

XX

XX 01-MAY-2001; 2001WO-DK000294.

XX

XX 03-MAY-2000; 2000DK-00000734.

XX

XX 13-SEP-2000; 2000DK-00001360.

XX

XX (NOVO ) NOVO NORDISK AS.

XX

XX Persson E, Olsen OH;

XX

XX WPI; 2002-049347/06.

XX

XX New human coagulation factor VII variants having coagulant activity for

XX use in treatment or prophylaxis of coagulation or bleeding disorders.

XX

XX Example 1; Fig 1; 47pp; English.

XX

XX The invention relates to a human coagulation factor VII variants having

CC



CC The invention discloses a human factor VII polypeptide, or a variant or  
 CC derivative of it, where an amino acid has been modified. This change  
 CC results in a polypeptide with the same or an increased activity when  
 CC compared to recombinant wild type human Factor VIIa. Blood coagulation  
 CC consists of a complex interaction of various blood components that  
 CC eventually give rise to a fibrin clot. Initiation of the haemostatic  
 CC process is mediated by the formation of a complex between tissue factor  
 CC and factor VIIa (the active form of the Factor VII zymogen). This complex  
 CC activates Factors IX and X, converting prothrombin to thrombin, which  
 CC activates Factors V and VIII leading to a full thrombin burst. The  
 CC thrombin converts fibrinogen to fibrin resulting in formation of a fibrin  
 CC clot. The Factor VII zymogen, or its derivative, can be modified in its  
 CC catalytic centre to inhibit the ability of the Factor VII polypeptide to  
 CC activate plasma factor X or IX. The factor VII derivative is useful for  
 CC preparing a medicament for the treatment of bleeding episodes, for the  
 CC enhancement of the normal haemostatic system, especially for the  
 CC treatment of haemophilia A or B and for inhibiting thrombus formation.  
 CC The inactivated factor VII derivatives are useful for treating intimal  
 CC hyperplasia, restenosis, cardiogenic emboli, platelet deposition  
 CC disorders, percutaneous transluminal coronary angioplasty (PTCA), stroke,  
 CC cancer, tumour metastasis, angiogenesis, ischaemia/reperfusion,  
 CC rheumatoid arthritis, thrombolysis, arteriosclerosis, acute and chronic  
 CC indications, such as inflammation, septic shock, hypotension, adult  
 CC respiratory distress syndrome (ARDS) and myocardial infarction. The  
 CC sequence presented is the inactivated human coagulation Factor VII  
 CC zymogen polypeptide

XX  
 SQ Sequence 406 AA;

Query Match 63.1%; Score 2187; DB 6; Length 406;  
 Best Local Similarity 100.0%; Pred. No. 2.8e-102;  
 Matches 406; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDXRTKLFWISYSDGDCASSPCQNGGS 60  
 DB 1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDXRTKLFWISYSDGDCASSPCQNGGS 60  
 QY 61 CKDQLQSYICFCLPAFEGRNCEHDKDQLICVNENGCEQYCSDHGTGKRSRCHEGYSL 120  
 DB 61 CKDQLQSYICFCLPAFEGRNCEHDKDQLICVNENGCEQYCSDHGTGKRSRCHEGYSL 120  
 QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGCPQVLLLVNQAQLCGG 180  
 DB 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGCPQVLLLVNQAQLCGG 180  
 QY 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDGQSRRAQVVIIPSTVPGTTN 240  
 DB 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDGQSRRAQVVIIPSTVPGTTN 240  
 QY 241 HDIALRLHQPVVLTVDHVVPLCLPERTFSERTLAFVRFSLVSGWQLDRGATALELMVL 300  
 DB 241 HDIALRLHQPVVLTVDHVVPLCLPERTFSERTLAFVRFSLVSGWQLDRGATALELMVL 300  
 QY 301 NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKGSGGPHATHYRGTWYLTG 360  
 DB 301 NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKGSGGPHATHYRGTWYLTG 360  
 QY 361 IVSWGQGCATVGHFVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFP 406  
 DB 361 IVSWGQGCATVGHFVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFP 406

RESULT 13

ABR63283

ID ABR63283 standard; protein; 406 AA.

XX ABR63283;

AC ABR63283;

DT 29-AUG-2003 (first entry)

DE Wild type human coagulation factor VII.

XX Human; coagulation factor VII; haemostatic; bleeding disorder;

KW haemophilia A; haemophilia B.

XX Homo sapiens.

XX WO2003027147-A2.

XX 03-APR-2003.

XX 26-SEP-2002; 2002WO-DK000635.

XX 27-SEP-2001; 2001DK-00001413.

XX (NOVO ) NOVO NORDISK AS.

XX Persson E, Olsen OH;

XX WPI; 2003-402973/38.

XX New human coagulation Factor VIIa polypeptide, useful for treating  
 PT bleeding disorders or episodes (e.g. haemophilia A or B) or for enhancing  
 PT the normal haemostatic system, comprises at least 2 substitutions in its  
 PT amino acid sequence.

XX Claim 5; Fig 1; 54pp; English.

XX The present invention relates to a factor VII polypeptide, haemostatic in  
 CC its action. The polypeptide is useful as a medicament or in preparing a  
 CC medicament for the treatment of bleeding disorders or bleeding episodes  
 CC or for the enhancement of the normal haemostatic system. The polypeptide  
 CC is particularly used for the treatment of haemophilia A or B. The present  
 CC sequence represents the wild type human coagulation factor VII  
 CC polypeptide

XX SQ Sequence 406 AA;

Query Match 63.1%; Score 2187; DB 6; Length 406;  
 Best Local Similarity 100.0%; Pred. No. 2.8e-102;  
 Matches 406; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDXRTKLFWISYSDGDCASSPCQNGGS 60  
 DB 1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDXRTKLFWISYSDGDCASSPCQNGGS 60  
 QY 61 CKDQLQSYICFCLPAFEGRNCEHDKDQLICVNENGCEQYCSDHGTGKRSRCHEGYSL 120  
 DB 61 CKDQLQSYICFCLPAFEGRNCEHDKDQLICVNENGCEQYCSDHGTGKRSRCHEGYSL 120  
 QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGCPQVLLLVNQAQLCGG 180  
 DB 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGCPQVLLLVNQAQLCGG 180  
 QY 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDGQSRRAQVVIIPSTVPGTTN 240  
 DB 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDGQSRRAQVVIIPSTVPGTTN 240  
 QY 241 HDIALRLHQPVVLTVDHVVPLCLPERTFSERTLAFVRFSLVSGWQLDRGATALELMVL 300  
 DB 241 HDIALRLHQPVVLTVDHVVPLCLPERTFSERTLAFVRFSLVSGWQLDRGATALELMVL 300  
 QY 301 NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKGSGGPHATHYRGTWYLTG 360  
 DB 301 NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKGSGGPHATHYRGTWYLTG 360  
 QY 361 IVSWGQGCATVGHFVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFP 406  
 DB 361 IVSWGQGCATVGHFVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFP 406

RESULT 14

AAO30527

ID AAO30527 standard; protein; 406 AA.

XX AAO30527;

AC AAO30527;

XX DT 22-SEP-2003 (first entry)

XX DE Human wild type coagulation factor VII protein.

XX KW Human; coagulation factor VII; coagulant; medicament; bleeding disorder;

XX KW haemophilia; haemostatic system; gene therapy.

XX OS Homo sapiens.

XX FH Key

XX FT Domain 1. .37 Location/Qualifiers

XX FT Modified-site 6 /note= "Gamma-carboxy glutamate (GLA) domain"

XX FT Modified-site 7 /note= "Gamma-carboxy glutamate"

XX FT Modified-site 14 /note= "Gamma-carboxy glutamate"

XX FT Modified-site 16 /note= "Gamma-carboxy glutamate"

XX FT Modified-site 19 /note= "Gamma-carboxy glutamate"

XX FT Modified-site 20 /note= "Gamma-carboxy glutamate"

XX FT Modified-site 25 /note= "Gamma-carboxy glutamate"

XX FT Modified-site 26 /note= "Gamma-carboxy glutamate"

XX FT Modified-site 29 /note= "Gamma-carboxy glutamate"

XX FT Modified-site 35 /note= "Gamma-carboxy glutamate"

XX FT Domain 153. .406 /note= "Gamma-carboxy glutamate"

XX FT Region 313. .329 /note= "Protease domain"

XX FT /note= "Loop region"

XX PN WO2003037932-A2.

XX PD 08-MAY-2003.

XX PF 01-NOV-2002; 2002WO-DK000726.

XX PR 02-NOV-2001; 2001DK-00001627.

XX PA (NOVO ) NOVO NORDISK AS.

XX PI Persson E, Olsen OH;

XX DR WPI; 2003-430502/40.

XX PT New Factor VII polypeptide, useful for preparing a medicament for

XX PT treating bleeding disorders, e.g. hemophilia A or B, or bleeding episodes

XX PT and for the enhancement of the normal hemostatic system.

XX PS Claim 1; Fig 1; 53pp; English.

XX CC The present invention relates to human coagulation factor VII variants

XX CC having coagulant activity and polynucleotides encoding such variants.

XX CC Sequences of the invention are useful for preparing medicaments for

XX CC treating bleeding disorders, e.g. haemophilia A or B or bleeding episodes

XX CC and for the enhancement of the normal haemostatic system. They are also

XX CC useful in gene therapy. The present sequence is human wild type

XX CC coagulation factor VII protein

XX SQ Sequence 406 AA;

Query Match 63.1%; Score 2187; DB 6; Length 406;

Best Local Similarity 100.0%; Pred. No. 2.8e-102;

Matches 406; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ANAFLXLRPGSLRXCKXQCSFXXARXIFKDXRKLFWISYSDGQCASSPCQNGGS 60

Db 1 ANAFLXLRPGSLRXCKXQCSFXXARXIFKDXRKLFWISYSDGQCASSPCQNGGS 60

QY 61 CKDQLQSYICFCLPAPEGRNCETHKDDQLICVNENGCEQYCSDDHTGTRSRCHRGYSL 120

Db 61 CKDQLQSYICFCLPAPEGRNCETHKDDQLICVNENGCEQYCSDDHTGTRSRCHRGYSL 120

QY 121 LADGUSCTPTVEYPCGKIPILEKRNASKPOGRIVGKVCPCGECPOVILLVNGAQLCGG 180

Db 121 LADGUSCTPTVEYPCGKIPILEKRNASKPOGRIVGKVCPCGECPOVILLVNGAQLCGG 180

QY 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVLIIPSTYVPGTTN 240

Db 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVLIIPSTYVPGTTN 240

QY 241 HDIALRLHQPVVLTDDHVPLCLPERTFSERTIAFVRSLSVSGWQLLDRGATALEIMVL 300

Db 241 HDIALRLHQPVVLTDDHVPLCLPERTFSERTIAFVRSLSVSGWQLLDRGATALEIMVL 300

QY 301 NVPRMTQDCLQOSRKVGDSPNITFYMFCAGYSDGSKDCKGSGGPHATHYRGTWLTG 360

Db 301 NVPRMTQDCLQOSRKVGDSPNITFYMFCAGYSDGSKDCKGSGGPHATHYRGTWLTG 360

QY 361 IVSWGQCATVGHFGVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFP 406

Db 361 IVSWGQCATVGHFGVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFP 406

RESULT 15

ADD02791

ID ADD02791 standard; protein; 406 AA.

XX AC ADD02791;

XX DT 01-JAN-2004 (first entry)

XX DE Human factor VIIa (fVIIa) #SEQ ID 1.

XX KW Vasotropic; antidiabetic; ophthalmological; antirheumatic; antiarthritic;

XX KW dermatological; antiinflammatory; cytostatic; factor VIIa; fVIIa;

XX KW curcuminoid; tumour; hypercoagulopathy; restenosis; diabetic retinopathy;

XX KW rheumatoid arthritis; skin disorder; inflammation; cancer; leukaemia;

XX KW breast cancer; lung cancer; liver cancer; melanoma; prostate cancer.

XX OS Homo sapiens.

XX FH Key

XX FT Location/Qualifiers

XX FT Misc-difference 153. .406

XX FT /note= "region specifically referred to in claim 4"

XX PN WO2003075847-A2.

XX PD 18-SEP-2003.

XX PF 07-MAR-2003; 2003WO-US0007043.

XX PR 08-MAR-2002; 2002US-0362762P.

XX PS (UYEM-) UNIV EMORY.

XX PI Shoji M, Synder J, Liotta DC, Sun A;

XX DR WPI; 2003-902745/82.

XX CC Composition useful for the treatment of pathological condition e.g.

XX CC restenosis, diabetic retinopathy and cancer comprises a protein, at least

XX CC one linker and a cytotoxic compound.

XX PS Claim 4; SEQ ID NO 1; 81pp; English.

XX CC The invention relates to a composition that comprises a protein

XX CC selectively binding a surface marker of a target cell, at least one

XX CC linker covalently bonded to the protein and a cytotoxic compound bonded

CC to the linker by a hydrolysable bond. The protein selectively binds to a  
CC tissue factor on the surface of the target cell and is capable of being  
CC internalised by the target cell. The protein is a component polypeptide  
CC of a factor VIIa and the polypeptide comprises the amino acid sequence  
CC (preferably His193) as given in the specification or its truncated or  
CC modified variant. The fluorinated curcuminoid 3,5-Bis-(2-fluoro-  
CC benzylidene)-piperidin-4-one (EF24) was 10 times more effective than  
CC either cisplatin or curcumin when tested against tumour cells in the NCI  
CC screening system. The composition of the invention is useful for  
CC modulating a pathological condition and proliferation of the cell in the  
CC treatment of e.g. hypercoagulopathy, restenosis, diabetic retinopathy,  
CC rheumatoid arthritis, skin disorder inflammation and cancer (e.g.  
CC leukemia, breast cancer, lung cancer, liver cancer, melanoma and  
CC prostate cancer). The composition is antiangiogenic and reduces the  
CC proliferation of a target cell thus causing reduction in a tumour. It  
CC also increases the efficacy of the cytotoxic agent and decreases the side  
CC effects by delivering the agent to target cells by binding the  
CC composition to the surface marker on the target cells as the composition  
CC is internalised by the target cell. The current sequence represents the  
CC human factor VIIa (fVIIa) amino acid sequence.  
XX  
SQ

Sequence 406 AA;

Query Match	63.1%;	Score 2187;	DB 7;	Length 406;
Best Local Similarity	97.5%;	Pred. No. 2.8e-102;		
Matches 396;	Conservative 10;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	ANAFLLXLRPGSLRXCKXQCGFFXARXIFKDAKRTKLFWISYSDGDDQASSPCQNGGS	60	
Db	1	ANAFLELRPGSLRERCKEQCCFEAREIFKDAERTKLFWISYSDGDDQASSPCQNGGS	60	
Qy	61	CKDQLQSYICFCLPAPEGRNCETHKDDQLICVNEGGCEQYCSDHGTGKSCRCHEGYSL	120	
Db	61	CKDQLQSYICFCLPAPEGRNCETHKDDQLICVNEGGCEQYCSDHGTGKSCRCHEGYSL	120	
Qy	121	LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPECPWQVLLVNGAQLCGG	180	
Db	121	LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPECPWQVLLVNGAQLCGG	180	
Qy	181	TLINTIWWVSAACFDKIKWRNLIAVLGHDLSHDGDSQRRVAQVLIIPSTVVPQTIN	240	
Db	181	TLINTIWWVSAACFDKIKWRNLIAVLGHDLSHDGDSQRRVAQVLIIPSTVVPQTIN	240	
Qy	241	HDIALRLHQPVVLTDHVPVPLCLPRTFSERTTAFVRFSLVSGWQLLDRGATALELMVL	300	
Db	241	HDIALRLHQPVVLTDHVPVPLCLPRTFSERTTAFVRFSLVSGWQLLDRGATALELMVL	300	
Qy	301	NVPRMTQDCIQOSRKVGDSFNITEYMFCAQYSDGSKDCKGDSGGPHATHYRGTWYLTG	360	
Db	301	NVPRMTQDCIQOSRKVGDSFNITEYMFCAQYSDGSKDCKGDSGGPHATHYRGTWYLTG	360	
Qy	361	IVSWGQCATVGHGVTVTRVSQVLEWLQKLMRSEPRGVLLRAPFP	406	
Db	361	IVSWGQCATVGHGVTVTRVSQVLEWLQKLMRSEPRGVLLRAPFP	406	

Search completed: February 10, 2005, 05:42:32  
Job time : 103.592 secs

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GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: February 10, 2005, 05:43:30 ; Search time 592.539 Seconds  
(without alignments)  
353.472 Million cell updates/sec

Title: US-10-617-619A-8

Perfect score: 3464

Sequence: 1 ANAFLXLRPGSLRXCKXX.....MHEALHNHYTKSLSLSPGK 641

Scoring table: BLOSUM62DX

Gapop 10.0 , Gapext 0.5

Searched: 1376875 seqs, 326749119 residues

Total number of hits satisfying chosen parameters: 1376875

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

#### Database :

Published Applications AA:\*

- 1: /cgn2\_6/ptodata/2/pubpaa/US07\_PUBCOMB.pep.\*
- 2: /cgn2\_6/ptodata/2/pubpaa/PCT\_NEW PUB.pep.\*
- 3: /cgn2\_6/ptodata/2/pubpaa/US06\_NEW PUB.pep.\*
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- 20: /cgn2\_6/ptodata/2/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3464	100.0	641	16	US-10-617-619-8
2	3464	100.0	679	16	US-10-617-619-11
3	3464	100.0	701	16	US-10-617-619-6
4	2187	63.1	406	10	US-09-782-587B-1
5	2187	63.1	406	10	US-09-782-587B-3
6	2187	63.1	406	14	US-10-109-498-1
7	2187	63.1	406	14	US-10-255-032-1
8	2187	63.1	406	14	US-10-281-727-1
9	2187	63.1	406	15	US-10-386-898-7
10	2187	63.1	406	15	US-10-383-898-1
11	2187	63.1	406	15	US-10-617-500-1
12	2187	63.1	406	15	US-10-263-205B-2
13	2187	63.1	406	16	US-10-617-619-1

14	2187	63.1	406	16	US-10-701-294-1	Sequence 1, Appli
15	2187	63.1	406	16	US-10-669-537-1	Sequence 1, Appli
16	2187	63.1	406	16	US-10-738-777-2	Sequence 2, Appli
17	2187	63.1	444	15	US-10-411-037-8	Sequence 8, Appli
18	2187	63.1	444	15	US-10-382-248-34	Sequence 34, Appli
19	2187	63.1	444	15	US-10-411-026-8	Sequence 8, Appli
20	2187	63.1	444	15	US-10-410-962-8	Sequence 8, Appli
21	2187	63.1	444	15	US-10-411-049-8	Sequence 8, Appli
22	2187	63.1	444	15	US-10-263-205B-3	Sequence 3, Appli
23	2187	63.1	444	16	US-10-410-930-8	Sequence 8, Appli
24	2187	63.1	444	16	US-10-410-937-8	Sequence 8, Appli
25	2187	63.1	444	16	US-10-411-012-8	Sequence 8, Appli
26	2187	63.1	444	16	US-10-287-994-8	Sequence 8, Appli
27	2187	63.1	444	16	US-10-410-913-8	Sequence 8, Appli
28	2187	63.1	444	16	US-10-738-777-3	Sequence 3, Appli
29	2187	63.1	459	16	US-10-741-601-503	Sequence 503, App
30	2187	63.1	459	16	US-10-741-601-504	Sequence 504, App
31	2187	63.1	466	14	US-10-017-122-2	Sequence 2, Appli
32	2187	63.1	466	15	US-10-375-741-14	Sequence 14, Appli
33	2187	63.1	481	16	US-10-741-601-501	Sequence 501, App
34	2187	63.1	481	16	US-10-741-601-502	Sequence 502, App
35	2187	63.0	405	15	US-10-360-101-225	Sequence 225, App
36	2113	61.0	426	10	US-09-951-121A-1	Sequence 1, Appli
37	2113	61.0	426	10	US-09-848-107-1	Sequence 1, Appli
38	2113	61.0	426	14	US-10-295-682-1	Sequence 1, Appli
39	2111	60.9	396	16	US-10-700-778-1	Sequence 1, Appli
40	1876.5	54.2	419	15	US-10-382-248-36	Sequence 36, Appli
41	1381	39.9	255	15	US-10-600-187-7	Sequence 7, Appli
42	1376	39.7	254	11	US-09-789-210-50	Sequence 50, Appli
43	1318.5	38.1	977	14	US-09-733-764-1	Sequence 1, Appli
44	1318.5	38.1	977	14	US-10-357-653-1	Sequence 1, Appli
45	1306	37.7	704	9	US-09-733-764-2	Sequence 2, Appli

#### ALIGNMENTS

#### RESULT 1

US-10-617-619-8  
; Sequence 8, Application US/10617619  
; Publication No. US20040110929A1  
; GENERAL INFORMATION:  
; APPLICANT: Bjorn, Soren E  
; APPLICANT: Nicolsaisen, Else M  
; APPLICANT: Jorgensen, Anker S  
; TITLE OF INVENTION: TF Binding Compound  
; FILE REFERENCE: 6455.200-US  
; CURRENT APPLICATION NUMBER: US/10/617,619  
; PRIOR FILING DATE: 2003-07-11  
; PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099  
; PRIOR FILING DATE: 2002-07-12  
; PRIOR APPLICATION NUMBER: US 60/404,568  
; PRIOR FILING DATE: 2002-08-19  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 8  
; LENGTH: 641  
; TYPE: PRT  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: Synthetic  
; NAME/KEY: misc feature  
; LOCATION: (6)..(7)  
; OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
; FEATURE:  
; NAME/KEY: misc feature  
; LOCATION: (14)..(14)  
; OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
; FEATURE:  
; NAME/KEY: misc feature  
; LOCATION: (16)..(16)  
; OTHER INFORMATION: Xaa can be any naturally occurring amino acid

FEATURE: misc feature  
NAME/KEY: (19)\_.(20)  
LOCATION: (19)\_.(20)  
OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
FEATURE: misc feature  
NAME/KEY: (25)\_.(26)  
LOCATION: (25)\_.(26)  
OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
FEATURE: misc feature  
NAME/KEY: (29)\_.(29)  
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OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
FEATURE: misc feature  
NAME/KEY: (35)\_.(35)  
LOCATION: (35)\_.(35)  
OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
US-10-617-619-8

Query Match 100.0%; Score 3464; DB 16; Length 641;  
Best Local Similarity 100.0%; Pred. No. 8.9e-214;  
Matches 641; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
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DB 1 ANAFLXXLRPGSLXKXKXXQCXXARXIFKDAKXKLFWISYSDGDCASSPCQNGGS 60  
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DB 61 CKDQLOSICFCCLPAPEGRNCETHKDDQLICVNENGGCEQYCSDDHTGTRKRCRCHEGYSL 120  
QY 121 LADGVSCTPTVEYPCGKIPILEKRNASKPGQIRVGGKVCPCGKPCWQVLLLVNQAOLCGG 180  
DB 121 LADGVSCTPTVEYPCGKIPILEKRNASKPGQIRVGGKVCPCGKPCWQVLLLVNQAOLCGG 180  
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DB 181 TLINTIWWVSAACHFCKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVITPSTVPGTTN 240  
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DB 301 NVPRMLTQDCLQOSRKVGDSNITEYMFCAAGSDGSKDCKGSGGPHATHYRGTYWLTG 360  
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DB 421 PPCPAPELLGGPSVFLFPKPKDITLMSRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 480  
QY 481 AKTKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGQPREP 540  
DB 481 AKTKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGQPREP 540  
QY 541 QVYTLPPSRDELTKNQVSLTCLVKGYFSPDIAVEWESNGQPENNYKTTTPPVLDSDGSFPL 600  
DB 541 QVYTLPPSRDELTKNQVSLTCLVKGYFSPDIAVEWESNGQPENNYKTTTPPVLDSDGSFPL 600  
QY 601 YSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 641  
DB 601 YSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 641

RESULT 2  
US-10-617-619-11  
; Sequence 11, Application US/10617619  
; Publication No. US20040110929A1  
; GENERAL INFORMATION:  
; APPLICANT: Bjorn, Soren E

APPLICANT: Nicolaisen, Else M  
APPLICANT: Jorgensen, Anker S  
TITLE OF INVENTION: TP Binding Compound  
FILE REFERENCE: 6455.200-US  
CURRENT APPLICATION NUMBER: US/10/617,619  
PRIOR FILING DATE: 2003-07-11  
PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099  
PRIOR FILING DATE: 2002-07-12  
PRIOR APPLICATION NUMBER: US 60/404,568  
PRIOR FILING DATE: 2002-08-19  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: PatentIn version 3.2  
SEQ ID NO 11  
LENGTH: 679  
TYPE: PRT  
ORGANISM: Artificial  
FEATURE:  
OTHER INFORMATION: Synthetic  
US-10-617-619-11

Query Match 100.0%; Score 3464; DB 16; Length 679;  
Best Local Similarity 98.4%; Pred. No. 9.5e-214;  
Matches 631; Conservative 10; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ANAFLXXLRPGSLXKXKXXQCXXARXIFKDAKXKLFWISYSDGDCASSPCQNGGS 60  
DB 39 ANAFLXXLRPGSLXKXKXXQCXXARXIFKDAKXKLFWISYSDGDCASSPCQNGGS 98  
QY 61 CKDQLOSICFCCLPAPEGRNCETHKDDQLICVNENGGCEQYCSDDHTGTRKRCRCHEGYSL 120  
DB 99 CKDQLOSICFCCLPAPEGRNCETHKDDQLICVNENGGCEQYCSDDHTGTRKRCRCHEGYSL 158  
QY 121 LADGVSCTPTVEYPCGKIPILEKRNASKPGQIRVGGKVCPCGKPCWQVLLLVNQAOLCGG 180  
DB 159 LADGVSCTPTVEYPCGKIPILEKRNASKPGQIRVGGKVCPCGKPCWQVLLLVNQAOLCGG 218  
QY 181 TLINTIWWVSAACHFCKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVITPSTVPGTTN 240  
DB 219 TLINTIWWVSAACHFCKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVITPSTVPGTTN 278  
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DB 279 HDIALLRLHQPVVLTDDHVVPLCLPERTFSERTLAFVRFSLVSGWQLLDRGATALEMVL 338  
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DB 339 NVPRMLTQDCLQOSRKVGDSNITEYMFCAAGSDGSKDCKGSGGPHATHYRGTYWLTG 398  
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DB 399 IVSWGQGCATVGHFGYTVRSQYIEWLQKLMRSEPRPGVLLRAPPPGSAEPKSCDKTHTC 458  
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DB 459 PPCPAPELLGGPSVFLFPKPKDITLMSRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 518  
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DB 519 AKTKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKGQPREP 578  
QY 541 QVYTLPPSRDELTKNQVSLTCLVKGYFSPDIAVEWESNGQPENNYKTTTPPVLDSDGSFPL 600  
DB 579 QVYTLPPSRDELTKNQVSLTCLVKGYFSPDIAVEWESNGQPENNYKTTTPPVLDSDGSFPL 638  
QY 601 YSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 641  
DB 639 YSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 679

RESULT 3  
US-10-617-619-6  
; Sequence 6, Application US/10617619  
; Publication No. US20040110929A1

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; GENERAL INFORMATION:
; APPLICANT: Bjorn, Soren E
; APPLICANT: Nicolaisen, Else M
; APPLICANT: Jorgensen, Anker S
; TITLE OF INVENTION: Th Binding Compound
; FILE REFERENCE: 6455.200-US
; CURRENT APPLICATION NUMBER: US/10/617,619
; CURRENT FILING DATE: 2003-07-11
; PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099
; PRIOR FILING DATE: 2002-07-12
; PRIOR APPLICATION NUMBER: US 60/404,568
; PRIOR FILING DATE: 2002-08-19
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 6
; LENGTH: 701
; TYPE: PRT
; ORGANISM: Human
; US-10-617-619-6

Query Match          100.0%; Score 3464; DB 16; Length 701;
Best Local Similarity 98.4%; Pred. No. 9.8e-214;
Matches 631; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

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Db 61 ANAFLELRPGSLRECKEQCSFEAREIFKDAERTKLFWISYSDGQCASSPCQNGGS 120
Qy 61 CKDQLOSYYICFCPLPAPEGRCNETHKDDQLICVNENGCCEQYCSDHGTGTRKSCHEGYSL 120
Db 121 CKDQLOSYYICFCPLPAPEGRCNETHKDDQLICVNENGCCEQYCSDHGTGTRKSCHEGYSL 180
Qy 121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGKCPQVOLLVNGAQLCGG 180
Db 181 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGKCPQVOLLVNGAQLCGG 240
Qy 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDDEQSRRAQVPIIPSTYVPGTTN 240
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Db 301 HDIALLRLHQPVLTDHVVPLCLPERTFSERTIAFVRFSLVSGWQLLDRGATALELMVL 360
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Db 361 NVPRMLTQDCLQOSRKVGDSFNITEYMFACAGYSDGSKDCKSGSGGPHATHYRGTWLTG 420
Qy 361 IVSWGQGCATVGHFGVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFGSAEPKSCDKTHTC 420
Db 421 IVSWGQGCATVGHFGVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFGSAEPKSCDKTHTC 480
Qy 421 PRCPAPELLGSPVFLPPPKDQTLMSRPTVTCVVVDVSHEDPEVKFNWYVDGVEVHN 480
Db 481 PRCPAPELLGSPVFLPPPKDQTLMSRPTVTCVVVDVSHEDPEVKFNWYVDGVEVHN 540
Qy 481 AKTKPREEQNSTYRVVSVLTIVLHQLWLNKCYKCKVSNKALPAPTEKTIKAKGQPREP 540
Db 541 AKTKPREEQNSTYRVVSVLTIVLHQLWLNKCYKCKVSNKALPAPTEKTIKAKGQPREP 600
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Db 601 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTTPVLDSDGSFFL 660
Qy 601 YSKLTVDKSRWQGNFVSCSWMEALHNNHYTKQSLSPGK 641
Db 661 YSKLTVDKSRWQGNFVSCSWMEALHNNHYTKQSLSPGK 701
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## RESULT 4

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US-09-782-587B-1
; Sequence 1, Application US/09782587B
; Publication No. US20030096338A1
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; GENERAL INFORMATION:
; APPLICANT: PEDERSEN, ANDERS H.
; APPLICANT: ANDERSON, KIM V.
; APPLICANT: BORNAES, CLAUS
; TITLE OF INVENTION: FACTOR VII OR VIIA-LIKE MOLECULES
; FILE REFERENCE: 31-001000US
; CURRENT APPLICATION NUMBER: US/09/782,587B
; CURRENT FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: PA 2000 00218
; PRIOR FILING DATE: 2000-02-11
; PRIOR APPLICATION NUMBER: 60/184,036
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: 60/241,916
; PRIOR FILING DATE: 2000-10-18
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 406
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD RES
; LOCATION: (6)..(7)
; OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
; NAME/KEY: MOD RES
; LOCATION: (14)
; OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
; NAME/KEY: MOD RES
; LOCATION: (16)
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; NAME/KEY: MOD RES
; LOCATION: (19)..(20)
; OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
; NAME/KEY: MOD RES
; LOCATION: (25)..(26)
; OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
; NAME/KEY: MOD RES
; LOCATION: (29)
; OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
; NAME/KEY: MOD RES
; LOCATION: (35)
; OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
; US-09-782-587B-1

Query Match          63.1%; Score 2187; DB 10; Length 406;
Best Local Similarity 100.0%; Pred. No. 3.7e-132;
Matches 406; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 ANAFLXLRPGSLRXCKXXQCXFXARXIFKDAKRTKLFWISYSDGQCASSPCQNGGS 60
Qy 61 CKDQLOSYYICFCPLPAPEGRCNETHKDDQLICVNENGCCEQYCSDHGTGTRKSCHEGYSL 120
Db 61 CKDQLOSYYICFCPLPAPEGRCNETHKDDQLICVNENGCCEQYCSDHGTGTRKSCHEGYSL 120
Qy 121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGKCPQVOLLVNGAQLCGG 180
Db 121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGKCPQVOLLVNGAQLCGG 180
Qy 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDDEQSRRAQVPIIPSTYVPGTTN 240
Db 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDDEQSRRAQVPIIPSTYVPGTTN 240
Qy 241 HDIALLRLHQPVLTDHVVPLCLPERTFSERTIAFVRFSLVSGWQLLDRGATALELMVL 300
Db 241 HDIALLRLHQPVLTDHVVPLCLPERTFSERTIAFVRFSLVSGWQLLDRGATALELMVL 300
Qy 301 NVPRMLTQDCLQOSRKVGDSFNITEYMFACAGYSDGSKDCKSGSGGPHATHYRGTWLTG 360
Db 301 NVPRMLTQDCLQOSRKVGDSFNITEYMFACAGYSDGSKDCKSGSGGPHATHYRGTWLTG 360
Qy 361 IVSWGQGCATVGHFGVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFP 406
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|||||  
Db 361 IVSWGQCATVGHFGVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFP 406

## RESULT 5

US-09-782-587B-3  
; Sequence 3, Application US/09782587B  
; Publication No. US20030096338A1  
; GENERAL INFORMATION:  
; APPLICANT: PEDERSEN, ANDERS H.  
; APPLICANT: ANDERSON, KIM V.  
; APPLICANT: BORNAES, CLAUS  
; TITLE OF INVENTION: FACTOR VII OR VIIA-LIKE MOLECULES  
; FILE REFERENCE: 31-001100US  
; CURRENT APPLICATION NUMBER: US/09/782,587B  
; CURRENT FILING DATE: 2002-03-26  
; PRIOR APPLICATION NUMBER: PA 2000 00218  
; PRIOR FILING DATE: 2000-02-11  
; PRIOR APPLICATION NUMBER: 60/184,036  
; PRIOR FILING DATE: 2000-02-22  
; PRIOR APPLICATION NUMBER: 60/241,916  
; PRIOR FILING DATE: 2000-10-18  
; NUMBER OF SEQ ID NOS: 19  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 3  
; LENGTH: 406  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-782-587B-3

Query Match 63.1%; Score 2187; DB 10; Length 406;  
Best Local Similarity 97.5%; Pred. No. 3.7e-132;  
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ANAFLLXLRPGSLRXKXKXQCSFYXARXIFKDAARTKLFWISYSDGDCASSPCQNGS 60  
Db 1 ANAFLELRPGSLREKEEQCSFEAREIFKDAERTKLFWISYSDGDCASSPCQNGS 60  
QY 61 CKDQLQSYICFCCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHGTGKRSRCHEGYSL 120  
Db 61 CKDQLQSYICFCCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHGTGKRSRCHEGYSL 120  
QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGECQVQVLLVNGAQLCGG 180  
Db 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGECQVQVLLVNGAQLCGG 180  
QY 181 TLINTIWWVSAACFPDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVLIIPSTYVPGTTN 240  
Db 181 TLINTIWWVSAACFPDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVLIIPSTYVPGTTN 240  
QY 241 HDIALRLHQPVLVTDHVPLCLPERTFSERTLAFVRFSLVSGWQQLDRGATALELMVL 300  
Db 241 HDIALRLHQPVLVTDHVPLCLPERTFSERTLAFVRFSLVSGWQQLDRGATALELMVL 300  
QY 301 NVPRMTQDCLQSRKVGDSNITEYMFCAVSGSDGSKDCKGSGGPHATHYRGTYWLTG 360  
Db 301 NVPRMTQDCLQSRKVGDSNITEYMFCAVSGSDGSKDCKGSGGPHATHYRGTYWLTG 360  
QY 361 IVSWGQCATVGHFGVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFP 406  
Db 361 IVSWGQCATVGHFGVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFP 406

## RESULT 6

US-10-109-498-1  
; Sequence 1, Application US/10109498  
; Publication No. US20030044908A1  
; GENERAL INFORMATION:  
; APPLICANT: Persson, Egon  
; TITLE OF INVENTION: Coagulation Factor VII Derivatives  
; FILE REFERENCE: 6286.200-US  
; CURRENT APPLICATION NUMBER: US/10/109,498  
; CURRENT FILING DATE: 2002-03-22

; PRIOR APPLICATION NUMBER: 60/281,261  
; PRIOR FILING DATE: 2001-04-03  
; PRIOR APPLICATION NUMBER: PA 2001 00477  
; PRIOR FILING DATE: 2001-03-22  
; NUMBER OF SEQ ID NOS: 20  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 1  
; LENGTH: 406  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: VARIANT  
; LOCATION: (1)...(406)  
; OTHER INFORMATION: Xaa = Any Amino Acid  
US-10-109-498-1

Query Match 63.1%; Score 2187; DB 14; Length 406;  
Best Local Similarity 100.0%; Pred. No. 3.7e-132;  
Matches 406; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ANAFLLXLRPGSLRXKXKXQCSFYXARXIFKDAARTKLFWISYSDGDCASSPCQNGS 60  
Db 1 ANAFLLXLRPGSLRXKXKXQCSFYXARXIFKDAARTKLFWISYSDGDCASSPCQNGS 60  
QY 61 CKDQLQSYICFCCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHGTGKRSRCHEGYSL 120  
Db 61 CKDQLQSYICFCCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHGTGKRSRCHEGYSL 120  
QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGECQVQVLLVNGAQLCGG 180  
Db 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGECQVQVLLVNGAQLCGG 180  
QY 181 TLINTIWWVSAACFPDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVLIIPSTYVPGTTN 240  
Db 181 TLINTIWWVSAACFPDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVLIIPSTYVPGTTN 240  
QY 241 HDIALRLHQPVLVTDHVPLCLPERTFSERTLAFVRFSLVSGWQQLDRGATALELMVL 300  
Db 241 HDIALRLHQPVLVTDHVPLCLPERTFSERTLAFVRFSLVSGWQQLDRGATALELMVL 300  
QY 301 NVPRMTQDCLQSRKVGDSNITEYMFCAVSGSDGSKDCKGSGGPHATHYRGTYWLTG 360  
Db 301 NVPRMTQDCLQSRKVGDSNITEYMFCAVSGSDGSKDCKGSGGPHATHYRGTYWLTG 360  
QY 361 IVSWGQCATVGHFGVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFP 406  
Db 361 IVSWGQCATVGHFGVYTRVSQVIEWLQKLMRSEPRPGVLLRAPFP 406

## RESULT 7

US-10-255-032-1  
; Sequence 1, Application US/10255032  
; Publication No. US20030100075A1  
; GENERAL INFORMATION:  
; APPLICANT: No. US20030100075A10 No. US20030100075A1disk A/S  
; TITLE OF INVENTION: HUMAN COAGULATION FACTOR VII POLYPEPTIDES  
; FILE REFERENCE: 6357-WO  
; CURRENT APPLICATION NUMBER: US/10/255,032  
; CURRENT FILING DATE: 2002-09-24  
; PRIOR APPLICATION NUMBER: DK PA 2001 01413  
; PRIOR FILING DATE: 2001-09-27  
; NUMBER OF SEQ ID NOS: 9  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 1  
; LENGTH: 406  
; TYPE: PRT  
; ORGANISM: human coagulation Factor VII  
; FEATURE:  
; NAME/KEY: MISC FEATURE  
; LOCATION: (1)...(406)  
; OTHER INFORMATION: Xaa means 4-carboxyglutamic acid (gamma-carboxyglutamate)  
US-10-255-032-1

Query Match 63.1%; Score 2187; DB 14; Length 406;  
Best Local Similarity 100.0%; Pred. No. 3.7e-132;  
Matches 406; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ANAFLXXLRPGSLXRXCKXXQCXXQCSFXXARXIFKDXRXTKLFWISYSDGDCASSPCQNGGS 60  
DB 1 ANAFLXXLRPGSLXRXCKXXQCXXQCSFXXARXIFKDXRXTKLFWISYSDGDCASSPCQNGGS 60

QY 61 CKDQLOSYYICFCPLPAFEGRNCETHKDDQLICVNEGSCQYCSDHGTGTRKSCRCHEGYSL 120  
DB 61 CKDQLOSYYICFCPLPAFEGRNCETHKDDQLICVNEGSCQYCSDHGTGTRKSCRCHEGYSL 120

QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGKCPQVLLLVNQAQLCGG 180  
DB 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGKCPQVLLLVNQAQLCGG 180

QY 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVVIIPSTVPGTTN 240  
DB 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVVIIPSTVPGTTN 240

QY 241 HDIALLRLHQPVVLTDRHVPLCLPERTFSERTLAFVRFSLVSGWQLDRGATALELMVL 300  
DB 241 HDIALLRLHQPVVLTDRHVPLCLPERTFSERTLAFVRFSLVSGWQLDRGATALELMVL 300

QY 301 NVPRMTQDCLOQSRKVGDSFNITEYMFACAGYSDGSKDCKGSDGSGPHATHYRGTYWLTG 360  
DB 301 NVPRMTQDCLOQSRKVGDSFNITEYMFACAGYSDGSKDCKGSDGSGPHATHYRGTYWLTG 360

QY 361 IVSWGOGCATVGHFGVYTVRSQVIEWLQKLMRSEPRPGVLLRAPFP 406  
DB 361 IVSWGOGCATVGHFGVYTVRSQVIEWLQKLMRSEPRPGVLLRAPFP 406

## RESULT 8

US-10-281-727-1

; Sequence 1, Application US/10281727  
; Publication No. US20030130191A1  
; GENERAL INFORMATION:  
; APPLICANT: Pereson, Egon  
; APPLICANT: Olsen, Ole Hvilsted  
; TITLE OF INVENTION: Human Coagulation Factor VII  
; TITLE OF INVENTION: Polypeptides  
; FILE REFERENCE: 6410.200-US  
; CURRENT APPLICATION NUMBER: US/10/281.727  
; PRIOR FILING DATE: 2002-10-28  
; PRIOR APPLICATION NUMBER: PA 2001 01627  
; PRIOR FILING DATE: 2001-11-02  
; PRIOR APPLICATION NUMBER: 60/335,383  
; PRIOR FILING DATE: 2001-11-15  
; NUMBER OF SEQ ID NOS: 7  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 1  
; LENGTH: 406  
; TYPE: PRT  
; ORGANISM: Homo Sapiens  
; FEATURE:  
; LOCATION: (1)-(406)  
; OTHER INFORMATION: Xaa means 4-carboxyglutamic acid (gamma-carboxyglutamate)

US-10-281-727-1

Query Match 63.1%; Score 2187; DB 14; Length 406;  
Best Local Similarity 100.0%; Pred. No. 3.7e-132;  
Matches 406; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ANAFLXXLRPGSLXRXCKXXQCXXQCSFXXARXIFKDXRXTKLFWISYSDGDCASSPCQNGGS 60  
DB 1 ANAFLXXLRPGSLXRXCKXXQCXXQCSFXXARXIFKDXRXTKLFWISYSDGDCASSPCQNGGS 60

QY 61 CKDQLOSYYICFCPLPAFEGRNCETHKDDQLICVNEGSCQYCSDHGTGTRKSCRCHEGYSL 120  
DB 61 CKDQLOSYYICFCPLPAFEGRNCETHKDDQLICVNEGSCQYCSDHGTGTRKSCRCHEGYSL 120

QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGKCPQVLLLVNQAQLCGG 180

DB 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGKCPQVLLLVNQAQLCGG 180  
QY 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVVIIPSTVPGTTN 240  
DB 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVVIIPSTVPGTTN 240

QY 241 HDIALLRLHQPVVLTDRHVPLCLPERTFSERTLAFVRFSLVSGWQLDRGATALELMVL 300  
DB 241 HDIALLRLHQPVVLTDRHVPLCLPERTFSERTLAFVRFSLVSGWQLDRGATALELMVL 300

QY 301 NVPRMTQDCLOQSRKVGDSFNITEYMFACAGYSDGSKDCKGSDGSGPHATHYRGTYWLTG 360  
DB 301 NVPRMTQDCLOQSRKVGDSFNITEYMFACAGYSDGSKDCKGSDGSGPHATHYRGTYWLTG 360

QY 361 IVSWGOGCATVGHFGVYTVRSQVIEWLQKLMRSEPRPGVLLRAPFP 406  
DB 361 IVSWGOGCATVGHFGVYTVRSQVIEWLQKLMRSEPRPGVLLRAPFP 406

## RESULT 9

US-10-386-898-7

; Sequence 7, Application US/10386898  
; Publication No. US20030229018A1  
; GENERAL INFORMATION:  
; APPLICANT: No. US20030229018A1o No. US20030229018A1disk Pharmaceuticals, Inc.  
; APPLICANT: Kjalke, Marianne  
; APPLICANT: Jakobsen, Palle  
; APPLICANT: Stennicke, Henning Ralf  
; TITLE OF INVENTION: DIMERIC TF ANTAGONIST  
; FILE REFERENCE: 6445.200-US  
; CURRENT APPLICATION NUMBER: US/10/386,898  
; PRIOR FILING DATE: 2003-03-12  
; PRIOR APPLICATION NUMBER: Danish Application PA 2002 00373  
; PRIOR FILING DATE: 2002-03-12  
; PRIOR APPLICATION NUMBER: US 60/365,935  
; PRIOR FILING DATE: 2002-03-19  
; NUMBER OF SEQ ID NOS: 7  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 7  
; LENGTH: 406  
; TYPE: PRT  
; ORGANISM: human coagulation Factor VII  
; FEATURE:  
; NAME/KEY: MISC FEATURE  
; LOCATION: (1)-(406)  
; OTHER INFORMATION: Xaa means 4-carboxyglutamic acid (gamma-carboxyglutamate)

US-10-386-898-7

Query Match 63.1%; Score 2187; DB 15; Length 406;  
Best Local Similarity 100.0%; Pred. No. 3.7e-132;  
Matches 406; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ANAFLXXLRPGSLXRXCKXXQCXXQCSFXXARXIFKDXRXTKLFWISYSDGDCASSPCQNGGS 60  
DB 1 ANAFLXXLRPGSLXRXCKXXQCXXQCSFXXARXIFKDXRXTKLFWISYSDGDCASSPCQNGGS 60

QY 61 CKDQLOSYYICFCPLPAFEGRNCETHKDDQLICVNEGSCQYCSDHGTGTRKSCRCHEGYSL 120  
DB 61 CKDQLOSYYICFCPLPAFEGRNCETHKDDQLICVNEGSCQYCSDHGTGTRKSCRCHEGYSL 120

QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGKCPQVLLLVNQAQLCGG 180  
DB 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGKCPQVLLLVNQAQLCGG 180

QY 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVVIIPSTVPGTTN 240  
DB 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVVIIPSTVPGTTN 240

QY 241 HDIALLRLHQPVVLTDRHVPLCLPERTFSERTLAFVRFSLVSGWQLDRGATALELMVL 300  
DB 241 HDIALLRLHQPVVLTDRHVPLCLPERTFSERTLAFVRFSLVSGWQLDRGATALELMVL 300

Qy 301 NVPRMTQDCLQOSRKVGDSFNITEYMFAGYSDGSKDSCGGGPHATHYRGTWYLTG 360  
Db 301 NVPRMTQDCLQOSRKVGDSFNITEYMFAGYSDGSKDSCGGGPHATHYRGTWYLTG 360  
Qy 361 IVSWGQCATVGHFVYTRVSQVIEWLQKLMRSEPRPGVLLRAPPP 406  
Db 361 IVSWGQCATVGHFVYTRVSQVIEWLQKLMRSEPRPGVLLRAPPP 406

## RESULT 10

US-10-383-898-1  
; Sequence 1, Application US/10383898  
; Publication No. US2004009914A1  
; GENERAL INFORMATION:  
; APPLICANT: Emory University  
; TITLE OF INVENTION: Curcuminoid-protein conjugates  
; FILE REFERENCE: E056 1060.1  
; CURRENT APPLICATION NUMBER: US/10/383,898  
; CURRENT FILING DATE: 2003-03-07  
; NUMBER OF SEQ ID NOS: 1  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 1  
; LENGTH: 406  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CHAIN  
; LOCATION: (1)...(406)  
US-10-383-898-1

Query Match 63.1%; Score 2187; DB 15; Length 406;  
Best Local Similarity 97.5%; Pred. No. 3.7e-132;  
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ANAFLLXLPGLSLXRCXKXQCSFYXARXIFKDAERTKLFWISYSDGDCASSPCQNGGS 60  
Db 1 ANAFLEELRPGSLERECKEQCSFEAREIFKDAERTKLFWISYSDGDCASSPCQNGGS 60  
Qy 61 CKDQLOSICYFCCLPAFEGRCNETHKDDQLICVNENGGCEQYCDSDHTGTRKSRCHEGYSL 120  
Db 61 CKDQLOSICYFCCLPAFEGRCNETHKDDQLICVNENGGCEQYCDSDHTGTRKSRCHEGYSL 120  
Qy 121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGECQVQLLVNQAOLCGG 180  
Db 121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGECQVQLLVNQAOLCGG 180  
Qy 181 TLINTIWWVSAACHCFDKIKWRNLIAVLGEHDLSEHDGDEQSRRAQVLIIPSTYVPGTTN 240  
Db 181 TLINTIWWVSAACHCFDKIKWRNLIAVLGEHDLSEHDGDEQSRRAQVLIIPSTYVPGTTN 240  
Qy 241 HDIALLRLHQPVLVTDHVVPLCLPERTFSERTLAFVRFSLVSGWGLDGRGATALEMVL 300  
Db 241 HDIALLRLHQPVLVTDHVVPLCLPERTFSERTLAFVRFSLVSGWGLDGRGATALEMVL 300  
Qy 301 NVPRMTQDCLQOSRKVGDSFNITEYMFAGYSDGSKDSCGGGPHATHYRGTWYLTG 360  
Db 301 NVPRMTQDCLQOSRKVGDSFNITEYMFAGYSDGSKDSCGGGPHATHYRGTWYLTG 360  
Qy 361 IVSWGQCATVGHFVYTRVSQVIEWLQKLMRSEPRPGVLLRAPPP 406  
Db 361 IVSWGQCATVGHFVYTRVSQVIEWLQKLMRSEPRPGVLLRAPPP 406

## RESULT 11

US-10-617-500-1  
; Sequence 1, Application US/10617500  
; Publication No. US20040072755A1  
; GENERAL INFORMATION:  
; APPLICANT: Novo Nordisk Pharmaceuticals, Inc.  
; APPLICANT: Stennicke, Henning R  
; APPLICANT: Bjorn, Soren E  
; APPLICANT: Petersen, Lars C  
; TITLE OF INVENTION: Tf Antagonist

; FILE REFERENCE: 6510, 200-US  
; CURRENT APPLICATION NUMBER: US/10/617,500  
; CURRENT FILING DATE: 2003-07-11  
; PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01100  
; PRIOR FILING DATE: 2002-07-12  
; PRIOR APPLICATION NUMBER: US 60/404,567  
; PRIOR FILING DATE: 2002-08-19  
; NUMBER OF SEQ ID NOS: 3  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 1  
; LENGTH: 406  
; TYPE: PRT  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: Synthetic  
; NAME/KEY: MISC FEATURE  
; LOCATION: (1)...(406)  
; OTHER INFORMATION: Xaa=4-carboxyglutamic acid (gamma-carboxyglutamate)  
US-10-617-500-1

Query Match 63.1%; Score 2187; DB 15; Length 406;  
Best Local Similarity 100.0%; Pred. No. 3.7e-132;  
Matches 406; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ANAFLLXLPGLSLXRCXKXQCSFYXARXIFKDAERTKLFWISYSDGDCASSPCQNGGS 60  
Db 1 ANAFLLXLPGLSLXRCXKXQCSFYXARXIFKDAERTKLFWISYSDGDCASSPCQNGGS 60  
Qy 61 CKDQLOSICYFCCLPAFEGRCNETHKDDQLICVNENGGCEQYCDSDHTGTRKSRCHEGYSL 120  
Db 61 CKDQLOSICYFCCLPAFEGRCNETHKDDQLICVNENGGCEQYCDSDHTGTRKSRCHEGYSL 120  
Qy 121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGECQVQLLVNQAOLCGG 180  
Db 121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCGECQVQLLVNQAOLCGG 180  
Qy 181 TLINTIWWVSAACHCFDKIKWRNLIAVLGEHDLSEHDGDEQSRRAQVLIIPSTYVPGTTN 240  
Db 181 TLINTIWWVSAACHCFDKIKWRNLIAVLGEHDLSEHDGDEQSRRAQVLIIPSTYVPGTTN 240  
Qy 241 HDIALLRLHQPVLVTDHVVPLCLPERTFSERTLAFVRFSLVSGWGLDGRGATALEMVL 300  
Db 241 HDIALLRLHQPVLVTDHVVPLCLPERTFSERTLAFVRFSLVSGWGLDGRGATALEMVL 300  
Qy 301 NVPRMTQDCLQOSRKVGDSFNITEYMFAGYSDGSKDSCGGGPHATHYRGTWYLTG 360  
Db 301 NVPRMTQDCLQOSRKVGDSFNITEYMFAGYSDGSKDSCGGGPHATHYRGTWYLTG 360  
Qy 361 IVSWGQCATVGHFVYTRVSQVIEWLQKLMRSEPRPGVLLRAPPP 406  
Db 361 IVSWGQCATVGHFVYTRVSQVIEWLQKLMRSEPRPGVLLRAPPP 406

## RESULT 12

US-10-263-205B-2  
; Sequence 2, Application US/10263205B  
; Publication No. US20040087498A1  
; GENERAL INFORMATION:  
; APPLICANT: BERKNER, Kathleen L.  
; APPLICANT: PETERSEN, Lars  
; APPLICANT: HART, Charles E.  
; APPLICANT: HEDNER, Ulla  
; APPLICANT: BREGENGAARD, Claus  
; TITLE OF INVENTION: MODIFIED FACTOR VII  
; FILE REFERENCE: 13952N-8-5-1  
; CURRENT APPLICATION NUMBER: US/10/263,205B  
; CURRENT FILING DATE: 2002-10-01  
; PRIOR APPLICATION NUMBER: 08/464,029  
; PRIOR FILING DATE: 1995-06-05  
; PRIOR APPLICATION NUMBER: 08/327,690  
; PRIOR FILING DATE: 1994-10-24  
; PRIOR APPLICATION NUMBER: PCT/US94/05779



1	ANAFLLXLRPSGLXKXCXXQCSFXAXRXIIPKDAARTKLFWISYSDGDCASSPQNGGS	60
61	CKDQLQSYICFLPAFEGRNCETHKDQDOLICVNENGCGEOYCSDDHTGTRKSCRCHEGYSL	120
61	CKDQLQSYICFLPAFEGRNCETHKDQDOLICVNENGCGEOYCSDDHTGTRKSCRCHEGYSL	120
121	LADGVSCTPTVEYPGCKIPILEKRNASKPQGRIVGGKVCPKGBCPQWVLLLVNQAOLCGG	180
121	LADGVSCTPTVEYPGCKIPILEKRNASKPQGRIVGGKVCPKGBCPQWVLLLVNQAOLCGG	180
181	TLIINTIWWVSAACHFDKIKWRNLIIVLGEHDLSEHDGDEQSRRAQVVIIPSTIYVPGTNN	240
181	TLIINTIWWVSAACHFDKIKWRNLIIVLGEHDLSEHDGDEQSRRAQVVIIPSTIYVPGTNN	240
241	HDIALRLHQPVVLTDHVPLCLPERTSETTLAFVRFSLVSGWQLLDRGATALEIMVL	300
241	HDIALRLHQPVVLTDHVPLCLPERTSETTLAFVRFSLVSGWQLLDRGATALEIMVL	300
301	NVPRLMTQDCLQOSRKVGDSPNITEYMFACYSDGSKCKSGDSGGPHATHYGTWLTG	360
301	NVPRLMTQDCLQOSRKVGDSPNITEYMFACYSDGSKCKSGDSGGPHATHYGTWLTG	360
361	IVSWGCGCATVGHFGYITRVSYIEWLQKLMRSRPRFGVLLRAPFP	406
361	IVSWGCGCATVGHFGYITRVSYIEWLQKLMRSRPRFGVLLRAPFP	406

```

RESULT 15
US-10-669-537-1
; Sequence 1, Application US/10669537
; Publication No. US20040192602A1
; GENERAL INFORMATION:
; APPLICANT: Persson, Egon
; APPLICANT: Olsen, Ole Hvilsted
; TITLE OF INVENTION: Human Coagulation Factor VII Polypeptides
; FILE REFERENCE: 6544.200-US
; CURRENT APPLICATION NUMBER: US/10/669.537
; CURRENT FILING DATE: 2003-09-24
; PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01423
; PRIOR FILING DATE: 2002-09-25
; PRIOR APPLICATION NUMBER: US 60/417,927
; PRIOR FILING DATE: 2002-10-11
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
; LENGTH: 406
; TYPE: PRT
; ORGANISM: Human
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (1)..(406)
; OTHER INFORMATION: Xaa=carboxyglutamic acid (gamma-carboxyglutamate)
; US-10-669-537-1

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	Query Match	63.1%;	Score 2187;	DB 16;	Length 406;
	Best Local Similarity	100.0%;	Pred. No. 3.7e-132;		
	Matches 406;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0
Qy	1	ANAFLLXLRPGSLXRXCXXQCXXKXIFKDAARTKLFWISYSDGDCASSPQNGGS	60		
Db	1	ANAFLLXLRPGSLXRXCXXQCXXKXIFKDAARTKLFWISYSDGDCASSPQNGGS	60		
Qy	61	CKDQLSYICFLPAFEGRNCEETHDDQ.I.CVNENGGEQYCSDHGTGKSCRCHEGYSL	120		
Db	61	CKDQLSYICFLPAFEGRNCEETHDDQ.I.CVNENGGEQYCSDHGTGKSCRCHEGYSL	120		
Qy	121	LADGVCTTVPYPCCKIPLEKRNASKPQGRIVGGKVCPKGECFPWVLLVNGAQLCGG	180		
Db	121	LADGVCTTVPYPCCKIPLEKRNASKPQGRIVGGKVCPKGECFPWVLLVNGAQLCGG	180		
Qy	181	TLTINTIWWVSAACHCFDKIKXNENLAVLGEHDLSEHDGDEQSRRAQVVIIPSTVVPETT	240		

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: February 10, 2005, 05:40:01 ; Search time 30.1042 Seconds  
(without alignments)  
1589.479 Million cell updates/sec

Title: US-10-617-619A-8

Perfect score: 3464

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Scoring table: BLOSUM62DX

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.\*

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Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

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1	2187	63.1	406	1 US-08-295-411-5	Sequence 5, Appli
2	2187	63.1	406	2 US-08-355-471-5	Sequence 5, Appli
3	2187	63.1	406	4 US-09-782-587B-1	Sequence 1, Appli
4	2187	63.1	406	4 US-09-782-587B-3	Sequence 3, Appli
5	2187	63.1	406	5 PCT-US92-10242-5	Sequence 5, Appli
6	2187	63.1	444	1 US-08-475-845-2	Sequence 2, Appli
7	2187	63.1	444	2 US-08-327-690-2	Sequence 2, Appli
8	2187	63.1	444	2 US-08-660-289-2	Sequence 2, Appli
9	2187	63.1	444	2 US-08-537-807-2	Sequence 2, Appli
10	2187	63.1	444	2 US-08-871-003-2	Sequence 2, Appli
11	2187	63.1	444	3 US-08-464-233-2	Sequence 2, Appli
12	2187	63.1	444	3 US-09-189-607-2	Sequence 2, Appli
13	2187	63.1	444	3 US-09-378-907-2	Sequence 2, Appli
14	2187	63.1	444	5 PCT-US94-05779-2	Sequence 2, Appli
15	2187	63.1	461	1 US-09-949-016-8839	Sequence 8839, Ap
16	2187	63.1	466	1 US-07-882-202A-4	Sequence 4, Appli
17	2187	63.1	466	1 US-08-021-615A-4	Sequence 4, Appli
18	2187	63.1	466	1 US-08-321-777-4	Sequence 4, Appli
19	2187	63.1	466	3 US-09-009-217-14	Sequence 14, Appl
20	2187	63.1	466	3 US-09-009-656-14	Sequence 14, Appl
21	2187	63.1	466	5 PCT-US93-04493-4	Sequence 4, Appli
22	2187	63.1	483	1 US-09-949-016-9523	Sequence 9523, Ap
23	2180	62.9	406	1 US-08-293-778-24	Sequence 24, Appl
24	1381	39.9	255	2 US-09-027-337-7	Sequence 7, Appli
25	1381	39.9	255	4 US-09-844-600-7	Sequence 7, Appli
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32	1298.5	37.5	497	4	US-09-499-846-6	Sequence 6, Appli
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37	1276	36.8	387	1	US-08-470-299-4	Sequence 4, Appli
38	1276	36.8	488	4	US-09-499-846-12	Sequence 12, Appl
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ALIGNMENTS

RESULT 1  
US-08-295-411-5  
; Sequence 5, Application US/08295411  
; Patent No. 5679639  
; GENERAL INFORMATION:  
; APPLICANT: Griffin, John H.  
; APPLICANT: Meesters, Rolf M.  
; TITLE OF INVENTION: Serine Protease-Derived Polypeptides and  
; TITLE OF INVENTION: Anti-Peptide Antibodies, Systems and Therapeutic Methods  
; TITLE OF INVENTION: for Inhibiting Coagulation  
; NUMBER OF SEQUENCES: 10  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Office of Patent Counsel, The Scripps  
; STREET: 10666 No. 5679639th Torrey Pines Road, TPC 8  
; CITY: La Jolla  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 92037  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION NUMBER: US/08/295,411  
; FILING DATE: 22-AUG-1994  
; CLASSIFICATION: 530  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/793,989  
; FILING DATE: 18-NOV-1991  
; CLASSIFICATION: 530  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Fitting, Thomas  
; REGISTRATION NUMBER: 34,163  
; REFERENCE/DOCKET NUMBER: TSRI263.0C1  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 619-554-2937  
; TELEFAX: 619-554-6312  
; INFORMATION FOR SEQ ID NO: 5:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 406 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; HYPOTHETICAL: NO  
; ANTI-SENSE: NO  
; FEATURE:  
; NAME/KEY: Region  
; LOCATION: 1..152

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; OTHER INFORMATION: /note= "Factor VII Light Chain"
; FEATURE:
; NAME/KEY: Region
; LOCATION: 153..406
; OTHER INFORMATION: /note= "Factor VII Heavy Chain"
; US-08-295-411-5

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Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

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RESULT 2
US-08-955-471-5
; Sequence 5, Application US/08955471
; Patent No. 5968751
; GENERAL INFORMATION:
; APPLICANT: Griffin, John H.
; APPLICANT: Mesters, Rolf M.
; TITLE OF INVENTION: Serine Protease-Derived Polypeptides and
; TITLE OF INVENTION: Anti-Peptide Antibodies, Systems and Therapeutic Methods
; TITLE OF INVENTION: for Inhibiting Coagulation
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Office of Patent Counsel, The Scripps
; ADDRESSEE: Research Institute
; STREET: 10666 No. 5968751th Torrey Pines Road, TPC 8
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/955,471
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/295,411
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
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; NAME: Fitting, Thomas
; REGISTRATION NUMBER: 34,163
; REFERENCE/DOCKET NUMBER: TSRI263.0C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619-554-2937
; TELEFAX: 619-554-6312
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 406 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FEATURE:
; NAME/KEY: Region
; LOCATION: 1..152
; OTHER INFORMATION: /note= "Factor VII Light Chain"
; FEATURE:
; NAME/KEY: Region
; LOCATION: 153..406
; OTHER INFORMATION: /note= "Factor VII Heavy Chain"
; US-08-955-471-5

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Best Local Similarity 97.5%; Pred. No. 1.9e-152;
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

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DB 61 CKDQLOSQYICFLPAPEGRNCETHKDDQLICVNENGGCEQYCSDDHTGKRSRCHGYSL 120

QY 121 LADGVSCCTPVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGECQWQVLLLVNGAQLCGG 180
DB 121 LADGVSCCTPVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGECQWQVLLLVNGAQLCGG 180

QY 181 TLINTIWWVSAACFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVIIPSTVYPGTTN 240
DB 181 TLINTIWWVSAACFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVIIPSTVYPGTTN 240

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DB 301 NVPRMLTQDCLQSRKVGDSNITEYMFAGYSDGSKDCKDGGGPHATHYRGTYWLTG 360

QY 361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPPP 406
DB 361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPPP 406

RESULT 3
US-09-782-587B-1
; Sequence 1, Application US/09782587B
; Patent No. 6806063
; GENERAL INFORMATION:
; APPLICANT: PEDERSEN, ANDERS H.
; APPLICANT: ANDERSON, KIM V.
; APPLICANT: BORNAES, CLAUS
; TITLE OF INVENTION: FACTOR VII OR VIIA-LIKE MOLECULES
; FILE REFERENCE: 31-001100US
; CURRENT APPLICATION NUMBER: US/09/782,587B
; CURRENT FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: PA 2000 00218
; PRIOR FILING DATE: 2000-02-11
; PRIOR APPLICATION NUMBER: 60/184,036
; PRIOR FILING DATE: 2000-02-22
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;; PRIOR APPLICATION NUMBER: 60/241,916  
;; PRIOR FILING DATE: 2000-10-18  
;; NUMBER OF SEQ ID NOS: 19  
;; SOFTWARE: PatentIn Ver. 2.1  
;; SEQ ID NO 1  
;; LENGTH: 406  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
;; NAME/KEY: MOD RES  
;; LOCATION: (6) (7)  
;; OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid  
;; NAME/KEY: MOD RES  
;; LOCATION: (14)  
;; OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid  
;; NAME/KEY: MOD RES  
;; LOCATION: (16)  
;; OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid  
;; NAME/KEY: MOD RES  
;; LOCATION: (19) (20)  
;; OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid  
;; NAME/KEY: MOD RES  
;; LOCATION: (25) (26)  
;; OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid  
;; NAME/KEY: MOD RES  
;; LOCATION: (29)  
;; OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid  
;; NAME/KEY: MOD RES  
;; LOCATION: (35)  
;; OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid

US-09-782-587B-1  
Query Match 63.1%; Score 2187; DB 4; Length 406;  
Best Local Similarity 100.0%; Pred. No. 1.9e-152;  
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US-09-782-587B-3  
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RESULT 4  
US-09-782-587B-3  
;; Sequence 3, Application US/09782587B  
;; Patent No. 6806063  
;; GENERAL INFORMATION:  
;; APPLICANT: PEDERSEN, ANDERS H.  
;; APPLICANT: ANDERSON, KIM V.  
;; APPLICANT: BORNAES, CLAUS

;; TITLE OF INVENTION: FACTOR VII OR VIIA-LIKE MOLECULES  
;; FILE REFERENCE: 31-001100US  
;; CURRENT APPLICATION NUMBER: US/09/782,587B  
;; CURRENT FILING DATE: 2002-03-26  
;; PRIOR APPLICATION NUMBER: PA 2000 00218  
;; PRIOR FILING DATE: 2000-02-11  
;; PRIOR APPLICATION NUMBER: 60/184,036  
;; PRIOR FILING DATE: 2000-02-22  
;; PRIOR APPLICATION NUMBER: 60/241,916  
;; PRIOR FILING DATE: 2000-10-18  
;; NUMBER OF SEQ ID NOS: 19  
;; SOFTWARE: PatentIn Ver. 2.1  
;; SEQ ID NO 3  
;; LENGTH: 406  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
;; US-09-782-587B-3

Query Match 63.1%; Score 2187; DB 4; Length 406;  
Best Local Similarity 97.5%; Pred. No. 1.9e-152;  
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

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RESULT 5  
PCT-US92-10242-5  
;; Sequence 5, Application PC/TUS9210242  
;; GENERAL INFORMATION:  
;; APPLICANT: Griffin, John H.  
;; APPLICANT: Mesters, Rolf  
;; TITLE OF INVENTION: Serine Protease-Derived Polypeptides and  
;; TITLE OF INVENTION: Anti-Peptide Antibodies, Systems and Therapeutic Methods  
;; TITLE OF INVENTION: for Inhibiting Coagulation  
;; NUMBER OF SEQUENCES: 10  
;; CORRESPONDENCE ADDRESS:  
;; ADDRESSEE: Office of Patent Counsel, The Scripps  
;; ADDRESSEE: Research Institute  
;; STREET: 10666 North Torrey Pines Road, TPC 8  
;; CITY: La Jolla  
;; STATE: CA  
;; COUNTRY: USA  
;; ZIP: 92037  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: Floppy disk  
;; COMPUTER: IBM PC compatible  
;; OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US92/10242  
FILING DATE: 19921118  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/793,989  
FILING DATE: 18-NOV-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Fitting, Thomas  
REGISTRATION NUMBER: 34,163  
REFERENCE/DOCKET NUMBER: SCRO472P  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 619-554-2937  
TELEFAX: 619-554-6312  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 406 amino acids  
TYPE: AMINO ACID  
TOPOLOGY: linear  
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HYPOTHETICAL: NO  
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FEATURE:  
NAME/KEY: Region  
LOCATION: 1..152  
OTHER INFORMATION: /note= "Factor VII Light Chain"  
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LOCATION: 153..406  
OTHER INFORMATION: /note= "Factor VII Heavy Chain"  
PCT-US92-10242-5

Query Match 63.1%; Score 2187; DB 5; Length 406;  
Best Local Similarity 97.5%; Pred. No. 1.9e-152;  
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;  
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DB 241 HDIALLRHQPVLTDHVPVLCPLPERTFSERTAFVRFSLVSGWQLLDRGATALELMVL 300  
QY 301 NVPRMTQDCLQQRKVGDSFNITEYMFCAQYSDGSKDCKGSGGPHATHYRGTYLGTG 360  
DB 301 NVPRMTQDCLQQRKVGDSFNITEYMFCAQYSDGSKDCKGSGGPHATHYRGTYLGTG 360  
QY 361 IVSWGQCATVGHFVVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406  
DB 361 IVSWGQCATVGHFVVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406

RESULT 6  
US-08-475-845-2  
Sequence 2, Application US/08475845  
Patent No. 5789965  
GENERAL INFORMATION:  
APPLICANT: Berkner, Kathleen L.  
APPLICANT: Petersen, Lars C.

APPLICANT: Hart, Charles E.  
APPLICANT: Hedner, Ulla  
APPLICANT: Bregengaard, Claus  
TITLE OF INVENTION: Modified Factor VII  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend Khourie and Crew  
STREET: One Market Plaza, Steuart Street Tower  
CITY: San Francisco  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94105-1492  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.24  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/475,845  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/327,690  
FILING DATE: 24-OCT-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/065,725  
FILING DATE: 21-MAY-1993  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/662,920  
FILING DATE: 28-FEB-1991  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Parmelee, Steven W.  
REGISTRATION NUMBER: 31,990  
REFERENCE/DOCKET NUMBER: 13952-8-4  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 206-467-9600  
TELEFAX: 415-543-5043  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 444 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-475-845-2

Query Match 63.1%; Score 2187; DB 1; Length 444;  
Best Local Similarity 97.5%; Pred. No. 2.1e-152;  
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ANAFLLRPGSLRXKXQCSFXXARXIFKDAKRTKLFWISYSDGDCASSPCQNGGS 60  
DB 39 ANAFLELRPGSLRECKEQCSFEAREIFKDAERTKLFWISYSDGDCASSPCQNGGS 98  
QY 61 CKDQLQSYICFCLPAFEGNRCETHKDDQLICVNENGCEQYCSDHGTGKRSCHREGYSL 120  
DB 99 CKDQLQSYICFCLPAFEGNRCETHKDDQLICVNENGCEQYCSDHGTGKRSCHREGYSL 158  
QY 121 LADGVSTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCPKCPQVLLVNGAQLCGG 180  
DB 159 LADGVSTPTVEYPCGKIPILEKRNASKPQGRIVGKVCPCPKCPQVLLVNGAQLCGG 218  
QY 181 TLINTIWWVSAHCFDKIKNWRNLIAVLGEHDLSEHGDGDSQRRVAQVIIPSTYVPGTTN 240  
DB 219 TLINTIWWVSAHCFDKIKNWRNLIAVLGEHDLSEHGDGDSQRRVAQVIIPSTYVPGTTN 278  
QY 241 HDIALLRHQPVLTDHVPVLCPLPERTFSERTAFVRFSLVSGWQLLDRGATALELMVL 300  
DB 279 HDIALLRHQPVLTDHVPVLCPLPERTFSERTAFVRFSLVSGWQLLDRGATALELMVL 338  
QY 301 NVPRMTQDCLQQRKVGDSFNITEYMFCAQYSDGSKDCKGSGGPHATHYRGTYLGTG 360

Db 339 NVPRMTQDCLQOSRKVGDSNITEYMFAGYSDGSKDSGGPHATHYRGTYLTG 398  
Qy 361 IVSWGQCATVGHFGVYTRVSQVIEWLQKLMRSEPRGVLRRAPFP 406  
Db 399 IVSWGQCATVGHFGVYTRVSQVIEWLQKLMRSEPRGVLRRAPFP 444

## RESULT 7

US-08-327-690-2  
; Sequence 2, Application US/08327690  
; Patent No. 5817788  
; GENERAL INFORMATION:  
; APPLICANT: Berkner, Kathleen L.  
; APPLICANT: Petersen, Lars C.  
; APPLICANT: Hart, Charles E.  
; APPLICANT: Hedner, Ulla  
; APPLICANT: Bregengaard, Claus  
; TITLE OF INVENTION: Modified Factor VII  
; NUMBER OF SEQUENCES: 4  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend Kourie and Crew  
; STREET: One Market Plaza, Steuart Street Tower  
; CITY: San Francisco  
; STATE: CA  
; COUNTRY: U.S.A.  
; ZIP: 94105-1492  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.24  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/327,690  
; FILING DATE: 24-OCT-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/065,725  
; FILING DATE: 21-MAY-1993  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/662,920  
; FILING DATE: 28-FEB-1991  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Parmelee, Steven W.  
; REGISTRATION NUMBER: 31,990  
; REFERENCE/DOCKET NUMBER: 13952-8-3  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 206-467-9600  
; TELEFAX: 415-543-5043  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 444 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-327-690-2

Query Match 63.1%; Score 2187; DB 2; Length 444;  
Best Local Similarity 97.5%; Pred. No. 2.1e-152;  
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 ANAFLLXRLGSLRXKXKXQCSFXARXIFKDAKTLFWISYSDGDCASSPCQNGS 60  
Db 39 ANAFLELRGSLRECKEQCSFEAREIFKDAERTKLFWISYSDGDCASSPCQNGS 98  
Qy 61 CKQLOQSYICFLPAPGRNCETHKDDQLICVNEGGCEQYCSDHGTGKRSCHGYSL 120  
Db 99 CKQLOQSYICFLPAPGRNCETHKDDQLICVNEGGCEQYCSDHGTGKRSCHGYSL 158  
Qy 121 LADGVSTPTVEYPCGKIPILEKRNASKPQGRIVGKVCBPCQWQVLLVNGAQLCGG 180

Db 159 LADGVSTPTVEYPCGKIPILEKRNASKPQGRIVGKVCBPCQWQVLLVNGAQLCGG 218  
Qy 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDGDEQSRRAQVLIIPSTVPGTTN 240  
Db 219 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDGDEQSRRAQVLIIPSTVPGTTN 278  
Qy 241 HDIALRLHQPVVLTDDHVVPLCLPERTFSERTIAFVRFSLVSGWQLDRGATALELMVL 300  
Db 279 HDIALRLHQPVVLTDDHVVPLCLPERTFSERTIAFVRFSLVSGWQLDRGATALELMVL 338  
Qy 301 NVPRMTQDCLQOSRKVGDSNITEYMFAGYSDGSKDSGGPHATHYRGTYLTG 360  
Db 339 NVPRMTQDCLQOSRKVGDSNITEYMFAGYSDGSKDSGGPHATHYRGTYLTG 398  
Qy 361 IVSWGQCATVGHFGVYTRVSQVIEWLQKLMRSEPRGVLRRAPFP 406  
Db 399 IVSWGQCATVGHFGVYTRVSQVIEWLQKLMRSEPRGVLRRAPFP 444

## RESULT 8

US-08-660-289-2  
; Sequence 2, Application US/08660289  
; Patent No. 5833982  
; GENERAL INFORMATION:  
; APPLICANT: Berkner, Kathleen L.  
; APPLICANT: Petersen, Lars C.  
; APPLICANT: Hart, Charles E.  
; APPLICANT: Hedner, Ulla  
; APPLICANT: Bregengaard, Claus  
; TITLE OF INVENTION: Modified Factor VII  
; NUMBER OF SEQUENCES: 4  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend Kourie and Crew  
; STREET: One Market Plaza, Steuart Street Tower  
; CITY: San Francisco  
; STATE: CA  
; COUNTRY: U.S.A.  
; ZIP: 94105-1492  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.24  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/660,289  
; FILING DATE:  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/475,845  
; FILING DATE: 07-JUN-1995  
; APPLICATION NUMBER: 08/327,690  
; FILING DATE:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/065,725  
; FILING DATE: 21-MAY-1993  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/662,920  
; FILING DATE: 28-FEB-1991  
; CLASSIFICATION: 514  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Parmelee, Steven W.  
; REGISTRATION NUMBER: 31,990  
; REFERENCE/DOCKET NUMBER: 13952-8-4  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 206-467-9600  
; TELEFAX: 415-543-5043  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 444 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein

US-08-660-289-2

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Query Match          63.1%; Score 2187; DB 2; Length 444;
Best Local Similarity 97.5%; Pred. No. 2.1e-152;
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

QY 1 ANAFLXXLRPGSLXRXCKXQCSFXXARXIFKDAARTKLFWISYSDGQCASSPCQNGGS 60
Db 39 ANAFLXXLRPGSLXRXCKXQCSFXXARXIFKDAARTKLFWISYSDGQCASSPCQNGGS 98

QY 61 CKDQLOSICFCCLPAFEGNRCETHKDDQLICVNENGGCEQYCSDDHTGTRSCRCHEGYSL 120
Db 99 CKDQLOSICFCCLPAFEGNRCETHKDDQLICVNENGGCEQYCSDDHTGTRSCRCHEGYSL 158

QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCBPCWQVLLVNGAQLCGG 180
Db 159 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCBPCWQVLLVNGAQLCGG 218

QY 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVVIIPSTYVPGTTN 240
Db 219 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVVIIPSTYVPGTTN 278

QY 241 HDIALRLHQPVLTDHVVPLCLPERTFSERTIAFVRFSLVSGWGLLDRGATALELMVL 300
Db 279 HDIALRLHQPVLTDHVVPLCLPERTFSERTIAFVRFSLVSGWGLLDRGATALELMVL 338

QY 301 NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKGDSGGPHATHYRGTWYLTG 360
Db 339 NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKGDSGGPHATHYRGTWYLTG 398

QY 361 IVSWGCGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPPP 406
Db 399 IVSWGCGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPPP 444
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RESULT 9

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US-08-537-807-2
; Sequence 2, Application US/08537807
; Patent No. 5861374
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: Modified Factor VII
; NUMBER OF SEQUENCES: 4
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/537,807
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/05779
; FILING DATE: 23-MAY-1994
; APPLICATION NUMBER: US 08/065,725
; FILING DATE: 21-MAY-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/662,920
; FILING DATE: 28-FEB-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Parmelee, Steven W.
; REGISTRATION NUMBER: 31,990
; REFERENCE/DOCKET NUMBER: 13952-8-1PC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 206-467-9600
; TELEFAX: 415-543-5043
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 444 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
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US-08-537-807-2

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Query Match          63.1%; Score 2187; DB 2; Length 444;
Best Local Similarity 97.5%; Pred. No. 2.1e-152;
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

QY 1 ANAFLXXLRPGSLXRXCKXQCSFXXARXIFKDAARTKLFWISYSDGQCASSPCQNGGS 60
Db 39 ANAFLXXLRPGSLXRXCKXQCSFXXARXIFKDAARTKLFWISYSDGQCASSPCQNGGS 98

QY 61 CKDQLOSICFCCLPAFEGNRCETHKDDQLICVNENGGCEQYCSDDHTGTRSCRCHEGYSL 120
Db 99 CKDQLOSICFCCLPAFEGNRCETHKDDQLICVNENGGCEQYCSDDHTGTRSCRCHEGYSL 158

QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCBPCWQVLLVNGAQLCGG 180
Db 159 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCBPCWQVLLVNGAQLCGG 218

QY 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVVIIPSTYVPGTTN 240
Db 219 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVVIIPSTYVPGTTN 278

QY 241 HDIALRLHQPVLTDHVVPLCLPERTFSERTIAFVRFSLVSGWGLLDRGATALELMVL 300
Db 279 HDIALRLHQPVLTDHVVPLCLPERTFSERTIAFVRFSLVSGWGLLDRGATALELMVL 338

QY 301 NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKGDSGGPHATHYRGTWYLTG 360
Db 339 NVPRMLTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKGDSGGPHATHYRGTWYLTG 398

QY 361 IVSWGCGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPPP 406
Db 399 IVSWGCGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPPP 444
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RESULT 10

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US-08-871-003-2
; Sequence 2, Application US/08871003
; Patent No. 5997864
; GENERAL INFORMATION:
; APPLICANT: Hart, Charles E.
; APPLICANT: Petersen, Lars C.
; APPLICANT: Hedner, Ulla
; APPLICANT: Rasmussen, Mirella E.
; TITLE OF INVENTION: Modified Factor VII
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ZymoGenetics, Inc.
; STREET: 1201 Eastlake Avenue East
; CITY: Seattle
; STATE: WA
; COUNTRY: USA
; ZIP: 98102
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/871,003
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sawislak, Deborah A
; REGISTRATION NUMBER: 37,438
; REFERENCE/DOCKET NUMBER: 90-07C7
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 444 amino acids
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; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-871-003-2

Query Match      63.1%; Score 2187; DB 2; Length 444;
Best Local Similarity 97.5%; Pred. No. 2.1e-152;
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ANAFLLXLRPGSLRXCKXQCSFXXARXIFKDXRTKLFWISYSDGQCASSPCQNGGS 60
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 39 ANAFLEELRPGSLRECKEQQCFEAREIFKDAERTKLFWISYSDGQCASSPCQNGGS 98
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 61 CKDQLQSYICFCLPAFEGNRCETHKDDQLICVNNNGGCEQYCSDHGTGKSCRCHEGYSL 120
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 99 CKDQLQSYICFCLPAFEGNRCETHKDDQLICVNNNGGCEQYCSDHGTGKSCRCHEGYSL 158
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 121 LADGVSCTPTVEYPCGKIPILEKRNASKPOGRIVGGKVCPRGECPCWQVLLVNGAQLCGG 180
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 159 LADGVSCTPTVEYPCGKIPILEKRNASKPOGRIVGGKVCPRGECPCWQVLLVNGAQLCGG 218
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 181 TLINTIWWVSAAHCFDKIKNWRNLIAVLGEHDLSEHGDGDSRRVAQVLIIPSTVPGTTN 240
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 219 TLINTIWWVSAAHCFDKIKNWRNLIAVLGEHDLSEHGDGDSRRVAQVLIIPSTVPGTTN 278
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 241 HDIALLRLHQPVLTDHVPVPLCLPERTFSERTLAFVRFSLVSGWQLLDRGATALEMLVL 300
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 279 HDIALLRLHQPVLTDHVPVPLCLPERTFSERTLAFVRFSLVSGWQLLDRGATALEMLVL 338
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 301 NVPLMTQDCLQOSRKVGDSPNITEYMFCAYSKSDSKGSDGSGGPHATHYRGTYWLTG 360
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 339 NVPLMTQDCLQOSRKVGDSPNITEYMFCAYSKSDSKGSDGSGGPHATHYRGTYWLTG 398
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 361 IVSWGQGCATVGHGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 399 IVSWGQGCATVGHGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 444
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
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RESULT 11
US-08-464-233-2
; Sequence 2, Application US/08464233
; Patent No. 6039944
; GENERAL INFORMATION:
; APPLICANT: Berkner, Kathleen L.
; APPLICANT: Petersen, Lars C.
; APPLICANT: Hart, Charles E.
; APPLICANT: Hedner, Ulla
; APPLICANT: Bregengaard, Claus
; TITLE OF INVENTION: Modified Factor VII
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: One Market Plaza, Steuart Street Tower
; CITY: San Francisco
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94105-1492
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/464,233
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/327,690
; FILING DATE: 24-OCT-1994
; APPLICATION NUMBER: 08/065,725
; FILING DATE: 21-MAY-1993
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
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; APPLICATION NUMBER: 07/662,920
; FILING DATE: 28-FEB-1991
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Parmelee, Steven W.
; REGISTRATION NUMBER: 31,990
; REFERENCE/DOCKET NUMBER: 13952-8-3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 206-467-9600
; TELEFAX: 415-543-5043
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 444 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-464-233-2

Query Match      63.1%; Score 2187; DB 3; Length 444;
Best Local Similarity 97.5%; Pred. No. 2.1e-152;
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ANAFLLXLRPGSLRXCKXQCSFXXARXIFKDXRTKLFWISYSDGQCASSPCQNGGS 60
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 39 ANAFLEELRPGSLRECKEQQCFEAREIFKDAERTKLFWISYSDGQCASSPCQNGGS 98
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 61 CKDQLQSYICFCLPAFEGNRCETHKDDQLICVNNNGGCEQYCSDHGTGKSCRCHEGYSL 120
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 99 CKDQLQSYICFCLPAFEGNRCETHKDDQLICVNNNGGCEQYCSDHGTGKSCRCHEGYSL 158
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 121 LADGVSCTPTVEYPCGKIPILEKRNASKPOGRIVGGKVCPRGECPCWQVLLVNGAQLCGG 180
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 159 LADGVSCTPTVEYPCGKIPILEKRNASKPOGRIVGGKVCPRGECPCWQVLLVNGAQLCGG 218
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 181 TLINTIWWVSAAHCFDKIKNWRNLIAVLGEHDLSEHGDGDSRRVAQVLIIPSTVPGTTN 240
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 219 TLINTIWWVSAAHCFDKIKNWRNLIAVLGEHDLSEHGDGDSRRVAQVLIIPSTVPGTTN 278
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 241 HDIALLRLHQPVLTDHVPVPLCLPERTFSERTLAFVRFSLVSGWQLLDRGATALEMLVL 300
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 279 HDIALLRLHQPVLTDHVPVPLCLPERTFSERTLAFVRFSLVSGWQLLDRGATALEMLVL 338
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 301 NVPLMTQDCLQOSRKVGDSPNITEYMFCAYSKSDSKGSDGSGGPHATHYRGTYWLTG 360
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 339 NVPLMTQDCLQOSRKVGDSPNITEYMFCAYSKSDSKGSDGSGGPHATHYRGTYWLTG 398
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 361 IVSWGQGCATVGHGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Qy 399 IVSWGQGCATVGHGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 444
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
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RESULT 12
US-09-189-607-2
; Sequence 2, Application US/09189607
; Patent No. 6168789
; GENERAL INFORMATION:
; APPLICANT: Berkner, Kathleen L.
; APPLICANT: Petersen, Lars C.
; APPLICANT: Hart, Charles E.
; APPLICANT: Hedner, Ulla
; APPLICANT: Bregengaard, Claus
; TITLE OF INVENTION: Modified Factor VII
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: One Market Plaza, Steuart Street Tower
; CITY: San Francisco
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94105-1492
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
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OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.24  
CURRENT APPLICATION DATA:  
APPLICANT: Hedner, Ulla  
APPLICANT: Rasmussen, Mirella E.  
TITLE OF INVENTION: Modified Factor VII  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: ZymoGenetics, Inc.  
STREET: 1201 Eastlake Avenue East  
CITY: Seattle  
STATE: WA  
COUNTRY: USA  
ZIP: 98102  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.24  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/189,607  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/660,289  
FILING DATE:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/327,690  
FILING DATE:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/065,725  
FILING DATE: 21-MAY-1993  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/662,920  
FILING DATE: 28-FEB-1991  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Parmelee, Steven W.  
REGISTRATION NUMBER: 31,990  
REFERENCE/DOCKET NUMBER: 13952-8-4  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 206-467-9600  
TELEFAX: 415-543-5043  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 444 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-09-189-607-2

Query Match 63.1%; Score 2187; DB 3; Length 444;  
Best Local Similarity 97.5%; Pred. No. 2.1e-152;  
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ANAFLLXLRPGSLXRXCKXQCSFXXARXIFKDAERTKLFWISYSDGDCASSPCQNGS 60  
DB 39 ANAFLEELRPGSLERECKEEQCSFEAREIFKDAERTKLFWISYSDGDCASSPCQNGS 98  
QY 61 CKDQLOSYICFCLPAFEGNCEHDKDDQLICVNENGCEQYCSHDTGTRKSCRCHEGYSL 120  
DB 99 CKDQLOSYICFCLPAFEGNCEHDKDDQLICVNENGCEQYCSHDTGTRKSCRCHEGYSL 158  
QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPEGCPWQVLLLVNGAQLCGG 180  
DB 159 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPEGCPWQVLLLVNGAQLCGG 218  
QY 181 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDGEQSRRAQVLIIPSTYVPGTTN 240  
DB 219 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDGEQSRRAQVLIIPSTYVPGTTN 278  
QY 241 HDIALRLHQPVLVDHVVPLCLPERTFSERTLAFVRFLSVSGWGLLDRGATALEMVL 300  
DB 279 HDIALRLHQPVLVDHVVPLCLPERTFSERTLAFVRFLSVSGWGLLDRGATALEMVL 338  
QY 301 NVPLMTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKSGGPHATHYRGTYWLTG 360  
DB 339 NVPLMTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKSGGPHATHYRGTYWLTG 398  
QY 361 IVSWGOGCATVGHFGVYTRVSVQYIEWLQKLMRSEPRPGVLLRAPFP 406  
DB 399 IVSWGOGCATVGHFGVYTRVSVQYIEWLQKLMRSEPRPGVLLRAPFP 444

RESULT 13  
US-09-178-907-2  
Sequence 2, Application US/09378907  
Patent No. 6183743  
GENERAL INFORMATION:

APPLICANT: Hart, Charles E.  
APPLICANT: Petersen, Lars C.  
APPLICANT: Hedner, Ulla  
APPLICANT: Rasmussen, Mirella E.  
TITLE OF INVENTION: Modified Factor VII  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: ZymoGenetics, Inc.  
STREET: 1201 Eastlake Avenue East  
CITY: Seattle  
STATE: WA  
COUNTRY: USA  
ZIP: 98102  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.24  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/378,907  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/871,003  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Sawislak, Deborah A.  
REGISTRATION NUMBER: 37,438  
REFERENCE/DOCKET NUMBER: 90-0707  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 444 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-09-378-907-2

Query Match 63.1%; Score 2187; DB 3; Length 444;  
Best Local Similarity 97.5%; Pred. No. 2.1e-152;  
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ANAFLLXLRPGSLXRXCKXQCSFXXARXIFKDAERTKLFWISYSDGDCASSPCQNGS 60  
DB 39 ANAFLEELRPGSLERECKEEQCSFEAREIFKDAERTKLFWISYSDGDCASSPCQNGS 98  
QY 61 CKDQLOSYICFCLPAFEGNCEHDKDDQLICVNENGCEQYCSHDTGTRKSCRCHEGYSL 120  
DB 99 CKDQLOSYICFCLPAFEGNCEHDKDDQLICVNENGCEQYCSHDTGTRKSCRCHEGYSL 158  
QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPEGCPWQVLLLVNGAQLCGG 180  
DB 159 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPEGCPWQVLLLVNGAQLCGG 218  
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DB 219 TLINTIWWVSAACHCFDKIKNWRNLIAVLGEHDLSEHGDGEQSRRAQVLIIPSTYVPGTTN 278  
QY 241 HDIALRLHQPVLVDHVVPLCLPERTFSERTLAFVRFLSVSGWGLLDRGATALEMVL 300  
DB 279 HDIALRLHQPVLVDHVVPLCLPERTFSERTLAFVRFLSVSGWGLLDRGATALEMVL 338  
QY 301 NVPLMTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKSGGPHATHYRGTYWLTG 360  
DB 339 NVPLMTQDCLQOSRKVGDSPNITEYMFAGYSDGSKDCKSGGPHATHYRGTYWLTG 398  
QY 361 IVSWGOGCATVGHFGVYTRVSVQYIEWLQKLMRSEPRPGVLLRAPFP 406  
DB 399 IVSWGOGCATVGHFGVYTRVSVQYIEWLQKLMRSEPRPGVLLRAPFP 444

RESULT 14  
PCT-US94-05779-2

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; Sequence 2, Application PC/TUS9405779
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8839
; LENGTH: 461
; TYPE: PRT
; ORGANISM: Human
; US-09-949-016-8839

Query Match      63.1%; Score 2187; DB 4; Length 461;
Best Local Similarity 97.5%; Pred. No. 2.2e-152;
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

QY 1 ANAFLLXLRPGSLXRXKXQCSFXARXIFKDAERTKLFWSYSDGDCASSPCQNGGS 60
Db 56 ANAFLEELRPGSLERECKEQCSFEAREIFKDAERTKLFWSYSDGDCASSPCQNGGS 115
QY 61 CKDQLQSYICFCFLPAFEGNRCETHKDDQLICVNENGGCEQYCSDDHTGTRKSCRCHEGYSL 120
Db 116 CKDQLQSYICFCFLPAFEGNRCETHKDDQLICVNENGGCEQYCSDDHTGTRKSCRCHEGYSL 175
QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGECPCWQVLLLVNQAQLCGG 180
Db 176 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGECPCWQVLLLVNQAQLCGG 235
QY 181 TLINTIWWVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVLIIPSTYVPGTTN 240
Db 236 TLINTIWWVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVLIIPSTYVPGTTN 295
QY 241 HDIALLRLHQPVLTDHVPLCLPERTFSERTLAFVRFSLVSGWQLLDRGATALELMLVL 300
Db 296 HDIALLRLHQPVLTDHVPLCLPERTFSERTLAFVRFSLVSGWQLLDRGATALELMLVL 355
QY 301 NVPRMLTQDCLQOSRKVGDSNITEYMFAGYSDGSKDSCKGSDGSGPHATHYRGTWYLTG 360
Db 356 NVPRMLTQDCLQOSRKVGDSNITEYMFAGYSDGSKDSCKGSDGSGPHATHYRGTWYLTG 415
QY 361 IVSWGCGCATVGHFGVYTVRSQYIEWLQKLMRSEPRPGVLLRAPFP 406
Db 416 IVSWGCGCATVGHFGVYTVRSQYIEWLQKLMRSEPRPGVLLRAPFP 461

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; Sequence 2, Application PC/TUS9405779
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8839
; LENGTH: 461
; TYPE: PRT
; ORGANISM: Human
; US-09-949-016-8839

Query Match      63.1%; Score 2187; DB 5; Length 444;
Best Local Similarity 97.5%; Pred. No. 2.1e-152;
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

QY 1 ANAFLLXLRPGSLXRXKXQCSFXARXIFKDAERTKLFWSYSDGDCASSPCQNGGS 60
Db 39 ANAFLEELRPGSLERECKEQCSFEAREIFKDAERTKLFWSYSDGDCASSPCQNGGS 98
QY 61 CKDQLQSYICFCFLPAFEGNRCETHKDDQLICVNENGGCEQYCSDDHTGTRKSCRCHEGYSL 120
Db 99 CKDQLQSYICFCFLPAFEGNRCETHKDDQLICVNENGGCEQYCSDDHTGTRKSCRCHEGYSL 158
QY 121 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGECPCWQVLLLVNQAQLCGG 180
Db 159 LADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPCGECPCWQVLLLVNQAQLCGG 218
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Db 219 TLINTIWWVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRAQVLIIPSTYVPGTTN 278
QY 241 HDIALLRLHQPVLTDHVPLCLPERTFSERTLAFVRFSLVSGWQLLDRGATALELMLVL 300
Db 279 HDIALLRLHQPVLTDHVPLCLPERTFSERTLAFVRFSLVSGWQLLDRGATALELMLVL 338
QY 301 NVPRMLTQDCLQOSRKVGDSNITEYMFAGYSDGSKDSCKGSDGSGPHATHYRGTWYLTG 360
Db 339 NVPRMLTQDCLQOSRKVGDSNITEYMFAGYSDGSKDSCKGSDGSGPHATHYRGTWYLTG 398
QY 361 IVSWGCGCATVGHFGVYTVRSQYIEWLQKLMRSEPRPGVLLRAPFP 406
Db 399 IVSWGCGCATVGHFGVYTVRSQYIEWLQKLMRSEPRPGVLLRAPFP 444

RESULT 15
US-09-949-016-8839
; Sequence 8839, Application US/09949016
; Patent No. 681239
; GENERAL INFORMATION:
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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: February 10, 2005, 06:40:33 ; Search time 43 Seconds  
(without alignments)  
402.758 Million cell updates/sec

Title: US-10-617-619A-7

Perfect score: 1263  
Sequence: 1 EPKSCDKTHTCPPCPAPPELL.....MHEALHHYTKSLSPGK 232

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 46

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 100%  
Maximum Match 100%  
Listing first 500 summaries

Database : Issued Patents AA.\*  
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2: /cgn2\_6/ptodata/1/iaa/5B COMB.pdp.\*  
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1263	100.0	232	2	US-08-595-043A-50
2	1263	100.0	232	4	US-09-988-362A-26
3	1263	100.0	331	3	US-09-178-869-2
4	1263	100.0	331	4	US-09-761-413-2
5	1263	100.0	360	3	US-09-180-100-11
6	1263	100.0	371	1	US-08-236-311-7
7	1263	100.0	371	3	US-08-457-918-7
8	1263	100.0	371	4	US-10-157-408-7
9	1263	100.0	376	3	US-09-180-100-22
10	1263	100.0	396	2	US-08-784-512-3
11	1263	100.0	396	3	US-09-176-228-3
12	1263	100.0	424	5	PCT-US95-03866-12
13	1263	100.0	424	5	PCT-US95-03866-14
14	1263	100.0	437	5	PCT-US96-10043-11
15	1263	100.0	442	4	US-08-472-888A-7
16	1263	100.0	442	5	PCT-US96-10043-9
17	1263	100.0	446	3	US-08-397-411-7
18	1263	100.0	449	1	US-08-458-516-13
19	1263	100.0	452	4	US-09-773-877B-16
20	1263	100.0	459	1	US-08-157-101A-7
21	1263	100.0	462	4	US-09-773-877B-18
22	1263	100.0	467	4	US-08-030-175-41
23	1263	100.0	467	4	US-08-030-175-42
24	1263	100.0	475	4	US-09-740-002-27
25	1263	100.0	476	2	US-08-378-939-10
26	1263	100.0	476	3	US-08-487-550-4
27	1263	100.0	476	3	US-08-487-550-12

28	1263	100.0	476	4	US-09-526-098-4	Sequence 4, Appli
29	1263	100.0	476	4	US-09-526-098-12	Sequence 12, Appl
30	1263	100.0	476	4	US-09-383-916-4	Sequence 4, Appli
31	1263	100.0	476	4	US-09-383-916-12	Sequence 12, Appl
32	1263	100.0	478	3	US-08-487-550-8	Sequence 8, Appli
33	1263	100.0	478	4	US-09-526-098-8	Sequence 8, Appli
34	1263	100.0	478	4	US-09-383-916-8	Sequence 8, Appli
35	1263	100.0	497	4	US-09-499-846-6	Sequence 6, Appli
36	1263	100.0	525	4	US-09-499-846-4	Sequence 4, Appli
37	1263	100.0	547	4	US-09-746-359A-54	Sequence 54, Appli
38	1263	100.0	557	4	US-09-773-877B-14	Sequence 14, Appl
39	1263	100.0	567	4	US-09-825-561A-16	Sequence 16, Appl
40	1263	100.0	567	4	US-09-773-877B-12	Sequence 12, Appl
41	1263	100.0	567	4	US-09-773-877B-20	Sequence 20, Appl
42	1263	100.0	571	4	US-09-746-359A-53	Sequence 53, Appl
43	1263	100.0	592	4	US-09-313-942-8	Sequence 8, Appli
44	1263	100.0	622	4	US-09-499-846-2	Sequence 2, Appli
45	1263	100.0	859	4	US-09-313-942-7	Sequence 7, Appli
46	1263	100.0	951	4	US-09-313-942-9	Sequence 9, Appli

ALIGNMENTS

RESULT 1  
US-08-595-043A-50  
; Sequence 50, Application US/08595043A  
; Patent No. 5935824  
; GENERAL INFORMATION:  
; APPLICANT: SGARLATO, GREGORY D.  
; TITLE OF INVENTION: PROTEIN EXPRESSION SYSTEM  
; NUMBER OF SEQUENCES: 90  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: MEDLEN & CARROLL  
; STREET: 220 MONTGOMERY STREET, SUITE 2200  
; CITY: SAN FRANCISCO  
; STATE: CALIFORNIA  
; COUNTRY: UNITED STATES OF AMERICA  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/595,043A  
; FILING DATE: 31-JAN-1996  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: CARROLL, PETER G.  
; REGISTRATION NUMBER: 32,837  
; REFERENCE/DOCKET NUMBER: SGAR-00371  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 50:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 232 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-595-043A-50

Query Match 100.0%; Score 1263; DB 2; Length 232;  
Best Local Similarity 100.0%; Pred. No. 5.4e-120;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
QY 61 NMYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

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Db 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPDIAVWESNGQPNKYKTP 180
Db 121 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPDIAVWESNGQPNKYKTP 180
QY 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFSQVSMHEALHNNHYTKSLSLSPGK 232
Db 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFSQVSMHEALHNNHYTKSLSLSPGK 232

RESULT 2
US-09-968-362A-26
; Sequence 26, Application US/09968362A
; Patent No. 6797493
; GENERAL INFORMATION:
; APPLICANT: Sun, Lee-Hwei K
; APPLICANT: Sun, Bill
; TITLE OF INVENTION: Fc fusion proteins of human granulocyte colony-stimulating factor
; TITLE OF INVENTION: increased biological activities
; FILE REFERENCE: 03SUN2001
; CURRENT APPLICATION NUMBER: US/09/968,362A
; CURRENT FILING DATE: 2001-10-01
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 26
; LENGTH: 232
; TYPE: PRT
; ORGANISM: Human IgG1 Fc with native hinge, CH2 and CH3 domains
US-09-968-362A-26

Query Match 100.0%; Score 1263; DB 4; Length 232;
Best Local Similarity 100.0%; Pred. No. 54e-120;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 EPKSCDKHTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120
Db 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPDIAVWESNGQPNKYKTP 180
Db 121 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPDIAVWESNGQPNKYKTP 180
QY 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFSQVSMHEALHNNHYTKSLSLSPGK 232
Db 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFSQVSMHEALHNNHYTKSLSLSPGK 232

RESULT 3
US-09-178-869-2
; Sequence 2, Application US/09178869B
; Patent No. 6197294
; GENERAL INFORMATION:
; APPLICANT: Tao, Weng
; APPLICANT: Wong, Shou
; APPLICANT: Hickey, William F
; APPLICANT: Hammang, Joseph P
; APPLICANT: Baetge, E. Edward
; TITLE OF INVENTION: CELL SURFACE-INDUCED MACROPHAGE ACTIVATION
; FILE REFERENCE: 17810-043
; CURRENT APPLICATION NUMBER: US/09/178,869B
; CURRENT FILING DATE: 1998-10-26
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 331
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-178-869-2

Query Match 100.0%; Score 1263; DB 4; Length 232;
Best Local Similarity 100.0%; Pred. No. 54e-120;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 1 EPKSCDKHTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120
Db 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPDIAVWESNGQPNKYKTP 180
Db 121 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPDIAVWESNGQPNKYKTP 180
QY 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFSQVSMHEALHNNHYTKSLSLSPGK 232
Db 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFSQVSMHEALHNNHYTKSLSLSPGK 232

RESULT 4
US-09-761-413-2
; Sequence 2, Application US/09761413
; Patent No. 6506891
; GENERAL INFORMATION:
; APPLICANT: Tao, Weng
; APPLICANT: Wong, Shou
; APPLICANT: Hickey, William F
; APPLICANT: Hammang, Joseph P
; APPLICANT: Baetge, E. Edward
; TITLE OF INVENTION: CELL SURFACE-INDUCED MACROPHAGE ACTIVATION
; FILE REFERENCE: 17810-043
; CURRENT APPLICATION NUMBER: US/09/761,413
; CURRENT FILING DATE: 2001-01-16
; PRIOR APPLICATION NUMBER: US/09/178,869
; PRIOR FILING DATE: 1998-10-26
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 331
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-761-413-2

Query Match 100.0%; Score 1263; DB 4; Length 331;
Best Local Similarity 100.0%; Pred. No. 9e-120;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 100 EPKSCDKHTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 159
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120
Db 160 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 219
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPDIAVWESNGQPNKYKTP 180
Db 220 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPDIAVWESNGQPNKYKTP 279
QY 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFSQVSMHEALHNNHYTKSLSLSPGK 232
Db 280 PVLDSGDSFFLYSKLTVDKSRWQGNVFSQVSMHEALHNNHYTKSLSLSPGK 331

RESULT 5
US-09-180-100-11
; Sequence 11, Application US/09180100
; Patent No. 6306395
; GENERAL INFORMATION:
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US-09-178-869-2
Query Match 100.0%; Score 1263; DB 3; Length 331;
Best Local Similarity 100.0%; Pred. No. 9e-120;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 100 EPKSCDKHTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 159
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120
Db 160 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 219
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPDIAVWESNGQPNKYKTP 180
Db 220 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPDIAVWESNGQPNKYKTP 279
QY 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFSQVSMHEALHNNHYTKSLSLSPGK 232
Db 280 PVLDSGDSFFLYSKLTVDKSRWQGNVFSQVSMHEALHNNHYTKSLSLSPGK 331

RESULT 4
US-09-761-413-2
; Sequence 2, Application US/09761413
; Patent No. 6506891
; GENERAL INFORMATION:
; APPLICANT: Tao, Weng
; APPLICANT: Wong, Shou
; APPLICANT: Hickey, William F
; APPLICANT: Hammang, Joseph P
; APPLICANT: Baetge, E. Edward
; TITLE OF INVENTION: CELL SURFACE-INDUCED MACROPHAGE ACTIVATION
; FILE REFERENCE: 17810-043
; CURRENT APPLICATION NUMBER: US/09/761,413
; CURRENT FILING DATE: 2001-01-16
; PRIOR APPLICATION NUMBER: US/09/178,869
; PRIOR FILING DATE: 1998-10-26
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 331
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-761-413-2

Query Match 100.0%; Score 1263; DB 4; Length 331;
Best Local Similarity 100.0%; Pred. No. 9e-120;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 100 EPKSCDKHTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 159
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120
Db 160 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 219
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPDIAVWESNGQPNKYKTP 180
Db 220 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPDIAVWESNGQPNKYKTP 279
QY 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFSQVSMHEALHNNHYTKSLSLSPGK 232
Db 280 PVLDSGDSFFLYSKLTVDKSRWQGNVFSQVSMHEALHNNHYTKSLSLSPGK 331

RESULT 5
US-09-180-100-11
; Sequence 11, Application US/09180100
; Patent No. 6306395
; GENERAL INFORMATION:
```

APPLICANT: NAKAMURA, No. 6306395io  
APPLICANT: NAGATA, Shigekazu  
TITLE OF INVENTION: NOVEL Fas ANTIGEN DERIVATIVE  
FILE REFERENCE: 1110-207P  
CURRENT APPLICATION NUMBER: US/09/180,100  
CURRENT FILING DATE: 1998-11-02  
EARLIER APPLICATION NUMBER: PCT/J997/01502  
EARLIER FILING DATE: 1997-05-01  
NUMBER OF SEQ ID NOS: 25  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 11  
LENGTH: 360  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-180-100-11

Query Match 100.0%; Score 1263; DB 3; Length 360;  
Best Local Similarity 100.0%; Pred. No. 1e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 129 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 188  
QY 61 NTYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSKNKAAPAPIEKT 120  
DB 189 NTYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSKNKAAPAPIEKT 248  
QY 121 ISKAKGQPREPQVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 180  
DB 249 ISKAKGQPREPQVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 308  
QY 181 PVLDSGGSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 232  
DB 309 PVLDSGGSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 360

## RESULT 6

US-08-236-311-7  
Sequence 7, Application US/08236311  
Patent No. 5565335  
GENERAL INFORMATION:  
APPLICANT: Capon, Daniel J.  
APPLICANT: Gregory, Timothy J.  
TITLE OF INVENTION: Adhesion Variants  
NUMBER OF SEQUENCES: 25  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Genentech, Inc.  
STREET: 460 Point San Bruno Blvd  
CITY: South San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94080  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: patin (Genentech)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/236,311  
FILING DATE: 02-MAY-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/936190  
FILING DATE: 26-AUG-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/842777  
FILING DATE: 18-FEB-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/250785  
FILING DATE: 28-SEP-1988  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/104329

FILING DATE: 02-OCT-1987  
ATTORNEY/AGENT INFORMATION:  
NAME: Hasek, Janet E.  
REGISTRATION NUMBER: 28,616  
REFERENCE/DOCKET NUMBER: 444P1C2  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415/225-1896  
TELEFAX: 415/952-9881  
TELEX: 910/371-7168  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 371 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
US-08-236-311-7

Query Match 100.0%; Score 1263; DB 1; Length 371;  
Best Local Similarity 100.0%; Pred. No. 1.1e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 140 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 199  
QY 61 NTYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSKNKAAPAPIEKT 120  
DB 200 NTYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSKNKAAPAPIEKT 259  
QY 121 ISKAKGQPREPQVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 180  
DB 260 ISKAKGQPREPQVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 319  
QY 181 PVLDSGGSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 232  
DB 320 PVLDSGGSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 371

## RESULT 7

US-08-457-918-7  
Sequence 7, Application US/08457918  
Patent No. 6117655  
GENERAL INFORMATION:  
APPLICANT: Capon, Daniel J.  
APPLICANT: Gregory, Timothy J.  
TITLE OF INVENTION: Adhesion Variants  
NUMBER OF SEQUENCES: 25  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Genentech, Inc.  
STREET: 460 Point San Bruno Blvd  
CITY: South San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94080  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: patin (Genentech)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/457,918  
FILING DATE: 1-JUN-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/236311  
FILING DATE: 02-MAY-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/936190  
FILING DATE: 26-AUG-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/842777  
FILING DATE: 18-FEB-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/250785

;; FILING DATE: 28-SEP-1988  
;; PRIOR APPLICATION DATA: 07/104329  
;; APPLICATION NUMBER: 07/104329  
;; FILING DATE: 02-OCT-1987  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Kubinec, Jeffrey S.  
;; REGISTRATION NUMBER: 36,575  
;; REFERENCE/DOCKET NUMBER: P0444PIC3  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: 415/225-8228  
;; TELEFAX: 415/952-9881  
;; TELEX: 910/371-7168  
;; INFORMATION FOR SEQ ID NO: 7:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 371 amino acids  
;; TYPE: amino acid  
;; TOPOLOGY: linear  
US-08-457-918-7  
  
Query Match 100.0%; Score 1263; DB 3; Length 371;  
Best Local Similarity 100.0%; Pred. No. 1.1e-119; Indels 0; Gaps 0;  
Matches 232; Conservative 0; Mismatches 0;  
  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 140 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 199  
  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 200 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 259  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 319  
  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSNVMEALHNHYTKQSLSLSPGK 232  
DB 320 PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSNVMEALHNHYTKQSLSLSPGK 371  
  
RESULT 8  
US-10-157-408-7  
; Sequence 7, Application US/10157408  
; Patent No. 6710169  
; GENERAL INFORMATION:  
; APPLICANT: Capon, Daniel J.  
; Gregory, Timothy J.  
; TITLE OF INVENTION: Adheson Variants  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Genentech, Inc.  
; STREET: 460 Point San Bruno Blvd  
; CITY: South San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94080  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: patin (Genentech)  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/157,408  
; FILING DATE: 28-May-2002  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/457,918  
; FILING DATE: 1-JUN-1995  
; APPLICATION NUMBER: 08/236311  
; FILING DATE: 02-MAY-1994  
; APPLICATION NUMBER: 07/936190  
; FILING DATE: 26-AUG-1992  
; APPLICATION NUMBER: 07/842777

;; FILING DATE: 18-FEB-1992  
;; APPLICATION NUMBER: 07/250785  
;; FILING DATE: 28-SEP-1988  
;; APPLICATION NUMBER: 07/104329  
;; FILING DATE: 02-OCT-1987  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Kubinec, Jeffrey S.  
;; REGISTRATION NUMBER: 36,575  
;; REFERENCE/DOCKET NUMBER: P0444PIC3  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: 415/225-8228  
;; TELEFAX: 415/952-9881  
;; TELEX: 910/371-7168  
;; INFORMATION FOR SEQ ID NO: 7:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 371 amino acids  
;; TYPE: amino acid  
;; TOPOLOGY: linear  
; SEQUENCE DESCRIPTION: SEQ ID NO: 7:  
US-10-157-408-7  
  
Query Match 100.0%; Score 1263; DB 4; Length 371;  
Best Local Similarity 100.0%; Pred. No. 1.1e-119; Indels 0; Gaps 0;  
Matches 232; Conservative 0; Mismatches 0;  
  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 140 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 199  
  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 200 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 259  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 319  
  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSNVMEALHNHYTKQSLSLSPGK 232  
DB 320 PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSNVMEALHNHYTKQSLSLSPGK 371  
  
RESULT 9  
US-09-180-100-22  
; Sequence 22, Application US/09180100  
; Patent No. 6306395  
; GENERAL INFORMATION:  
; APPLICANT: NAKAMURA, No. 6306395sio  
; APPLICANT: NAKAMURA, Shigekazu  
; TITLE OF INVENTION: NOVEL Fas ANTIGEN DERIVATIVE  
; FILE REFERENCE: 1110-207P  
; CURRENT APPLICATION NUMBER: US/09/180,100  
; CURRENT FILING DATE: 1998-11-02  
; EARLIER APPLICATION NUMBER: PCT/JP97/01502  
; EARLIER FILING DATE: 1997-05-01  
; NUMBER OF SEQ ID NOS: 25  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 22  
; LENGTH: 376  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-180-100-22  
  
Query Match 100.0%; Score 1263; DB 3; Length 376;  
Best Local Similarity 100.0%; Pred. No. 1.1e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 145 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 204  
  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Db 205 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 264

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180

Db 265 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 324

Qy 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMVHEALHNNHYTKQSLSLSPGK 232

Db 325 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMVHEALHNNHYTKQSLSLSPGK 376

RESULT 10

US-08-784-512-3

; Sequence 3, Application US/08784512

; Patent No. 5872209

; GENERAL INFORMATION:

; APPLICANT: BARTNIK, Eckart

; APPLICANT: EIDENMUELLER, Bernd

; APPLICANT: BUETTNER, Frank

; APPLICANT: CATERSON, Bruce

; APPLICANT: HUGHES, Clare

; TITLE OF INVENTION: An artificial recombinant substrate (rAGG 1)

; TITLE OF INVENTION: and native aggregan to study the proteolytic activity of

; TITLE OF INVENTION: "Aggrecanase" in cell culture systems

; NUMBER OF SEQUENCES: 4

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Foley & Lardner

; STREET: Suite 500, 3000 K Street, N.W.

; CITY: Washington, D.C.

; COUNTRY: USA

; ZIP: 20007-5109

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patentin Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/784,512

; FILING DATE: 17-JAN-1997

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: EP 96100682.2

; FILING DATE: 18-JAN-1996

; ATTORNEY/AGENT INFORMATION:

; NAME: GRANADOS, Patricia D.

; REGISTRATION NUMBER: 33,683

; REFERENCE/DOCKET NUMBER: 18748/311

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (202)672-5300

; TELEFAX: (202)672-5399

; TELEX: 904136

; INFORMATION FOR SEQ ID NO: 3:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 396 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: protein

; FEATURE:

; NAME/KEY: Protein

; LOCATION: 1..396

US-08-784-512-3

Query Match 100.0%; Score 1263; DB 2; Length 396;

Best Local Similarity 100.0%; Pred. No. 1.2e-119; Indels 0; Gaps 0;

Matches 232; Conservative 0; Mismatches 0;

Qy 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

Db 165 EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 224

Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Db 225 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 284

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180

Db 285 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 344

Qy 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMVHEALHNNHYTKQSLSLSPGK 232

Db 345 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMVHEALHNNHYTKQSLSLSPGK 396

RESULT 11

US-09-176-228-3

; Sequence 3, Application US/09176228

; Patent No. 6180334

; GENERAL INFORMATION:

; APPLICANT: BARTNIK, Eckart

; APPLICANT: EIDENMUELLER, Bernd

; APPLICANT: BUETTNER, Frank

; APPLICANT: CATERSON, Bruce

; APPLICANT: HUGHES, Clare

; TITLE OF INVENTION: An artificial recombinant substrate (rAGG 1)

; TITLE OF INVENTION: and native aggregan to study the proteolytic activity of

; TITLE OF INVENTION: "Aggrecanase" in cell culture systems

; NUMBER OF SEQUENCES: 4

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Foley & Lardner

; STREET: Suite 500, 3000 K Street, N.W.

; CITY: Washington, D.C.

; COUNTRY: USA

; ZIP: 20007-5109

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patentin Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/176,228

; FILING DATE:

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US/08/784,512

; FILING DATE: 17-JAN-1997

; APPLICATION NUMBER: EP 96100682.2

; FILING DATE: 18-JAN-1996

; ATTORNEY/AGENT INFORMATION:

; NAME: GRANADOS, Patricia D.

; REGISTRATION NUMBER: 33,683

; REFERENCE/DOCKET NUMBER: 18748/311

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (202)672-5300

; TELEFAX: (202)672-5399

; TELEX: 904136

; INFORMATION FOR SEQ ID NO: 3:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 396 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: protein

; FEATURE:

; NAME/KEY: Protein

; LOCATION: 1..396

US-09-176-228-3

Query Match 100.0%; Score 1263; DB 3; Length 396;

Best Local Similarity 100.0%; Pred. No. 1.2e-119; Indels 0; Gaps 0;

Matches 232; Conservative 0; Mismatches 0;

Qy 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

Db 165 EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 224

Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Db 225 NWYVDGVEVHNAKTPREBQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 284

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180

Db 285 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 344

QY 181 PVLDSGDSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232

Db 345 PVLDSGDSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 396

RESULT 12

PCT-US95-03866-12

; Sequence 12, Application PC/TUS9503866

; GENERAL INFORMATION:

; APPLICANT: CytoMed, Inc. (all states except US)

; APPLICANT: Nocka, Karl (US only)

; APPLICANT: Lobell, Robert B (US only)

; TITLE OF INVENTION: STABILIZED DIMER OF KIT LIGAND AND

; TITLE OF INVENTION: FLT-3/FLK-2 LIGAND

; NUMBER OF SEQUENCES: 36

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Fish & Neave

; STREET: 1251 Avenue of the Americas

; CITY: New York

; STATE: New York

; COUNTRY: United States of America

; ZIP: 10020

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: PCT/US95/03866

; FILING DATE:

; CLASSIFICATION:

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/220,379

; FILING DATE: 28-MAR-1994

; ATTORNEY/AGENT INFORMATION:

; NAME: Haley Jr, James F

; REGISTRATION NUMBER: 27,794

; REFERENCE/DOCKET NUMBER: CytoMed/2

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 212-596-9090

; TELEFAX: 212-596-9090

; INFORMATION FOR SEQ ID NO: 12:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 424 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

; MOLECULE TYPE: protein

PCT-US95-03866-12

Query Match 100.0%; Score 1263; DB 5; Length 424;

Best Local Similarity 100.0%; Pred. No. 1.3e-119;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTKCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

Db 193 EPKSCDKHTKCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 252

QY 61 NWYVDGVEVHNAKTPREBQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 120

Db 253 NWYVDGVEVHNAKTPREBQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 312

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180

Db 313 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 372

QY 181 PVLDSGDSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232

Db 373 PVLDSGDSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 424

RESULT 14

PCT-US96-10043-11

; Sequence 11, Application PC/TUS9610043

; GENERAL INFORMATION:

; APPLICANT: The General Hospital Corporation

Db 373 PVLDSGDSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 424

RESULT 13

PCT-US95-03866-14

; Sequence 14, Application PC/TUS9503866

; GENERAL INFORMATION:

; APPLICANT: CytoMed, Inc. (all states except US)

; APPLICANT: Nocka, Karl (US only)

; APPLICANT: Lobell, Robert B (US only)

; TITLE OF INVENTION: STABILIZED DIMER OF KIT LIGAND AND

; TITLE OF INVENTION: FLT-3/FLK-2 LIGAND

; NUMBER OF SEQUENCES: 36

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Fish & Neave

; STREET: 1251 Avenue of the Americas

; CITY: New York

; STATE: New York

; COUNTRY: United States of America

; ZIP: 10020

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: PCT/US95/03866

; FILING DATE:

; CLASSIFICATION:

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/220,379

; FILING DATE: 28-MAR-1994

; ATTORNEY/AGENT INFORMATION:

; NAME: Haley Jr, James F

; REGISTRATION NUMBER: 27,794

; REFERENCE/DOCKET NUMBER: CytoMed/2

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 212-596-9090

; TELEFAX: 212-596-9090

; INFORMATION FOR SEQ ID NO: 14:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 424 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

; MOLECULE TYPE: protein

PCT-US95-03866-14

Query Match 100.0%; Score 1263; DB 5; Length 424;

Best Local Similarity 100.0%; Pred. No. 1.3e-119;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTKCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

Db 193 EPKSCDKHTKCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 252

QY 61 NWYVDGVEVHNAKTPREBQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 120

Db 253 NWYVDGVEVHNAKTPREBQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 312

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180

Db 313 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 372

QY 181 PVLDSGDSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232

Db 373 PVLDSGDSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 424

RESULT 14

PCT-US96-10043-11

; Sequence 11, Application PC/TUS9610043

; GENERAL INFORMATION:

; APPLICANT: The General Hospital Corporation

;; TITLE OF INVENTION: P-SELECTIN LIGANDS AND RELATED MOLECULES  
;; TITLE OF INVENTION: AND METHODS  
;; NUMBER OF SEQUENCES: 14  
;; CORRESPONDENCE ADDRESS:  
;; ADDRESSEE: Fish & Richardson P.C.  
;; STREET: 225 Franklin Street  
;; CITY: Boston  
;; STATE: MA  
;; COUNTRY: USA  
;; ZIP: 02210-2804  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: Floppy disk  
;; COMPUTER: IBM PC compatible  
;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: Patent In Release #1.0, Version #1.30  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: PCT/US96/10043  
;; FILING DATE:  
;; CLASSIFICATION:  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 60/000,213  
;; FILING DATE: 14-JUN-1995  
;; CLASSIFICATION:  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Lech, Karen F.  
;; REGISTRATION NUMBER:  
;; REFERENCE/DOCKET NUMBER: 00786/284001  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: 617/542-5070  
;; TELEFAX: 617/542-8906  
;; TELEX: 200154  
;; INFORMATION FOR SEQ ID NO: 11:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 437 amino acids  
;; TYPE: amino acid  
;; STRANDEDNESS: not relevant  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: protein  
PCT-US96-10043-11  
  
Query Match 100.0%; Score 1263; DB 5; Length 437;  
Best Local Similarity 100.0%; Pred. No. 1.3e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 206 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 265  
  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
DB 266 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 325  
  
QY 121 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 180  
DB 326 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 385  
  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNYHTOKSLSLSPGK 232  
DB 386 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNYHTOKSLSLSPGK 437  
  
RESULT 15  
PCT-US96-10043-7  
Sequence 7, Application US/08472888A  
Patent No. 6613746  
GENERAL INFORMATION:  
APPLICANT: Seed, Brian  
APPLICANT: Walz, Gerd  
TITLE OF INVENTION: AGP-ANTIBODY FUSION PROTEINS  
TITLE OF INVENTION: AND RELATED MOLECULES AND METHODS  
NUMBER OF SEQUENCES: 9  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Clark & Elbing LLP

;; STREET: 176 Federal Street  
;; CITY: Boston  
;; STATE: MA  
;; COUNTRY: USA  
;; ZIP: 02110  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: Diskette  
;; COMPUTER: IBM Compatible  
;; OPERATING SYSTEM: DOS  
;; SOFTWARE: FastSeq for Windows Version 2.0  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/472,888A  
;; FILING DATE: 07-JUN-1995  
;; CLASSIFICATION: 424  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 07/618,314  
;; FILING DATE: 23-NOV-1990  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Elbing, Karen L.  
;; REGISTRATION NUMBER: 35,238  
;; REFERENCE/DOCKET NUMBER: 00786/258001  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: 617-428-0200  
;; TELEFAX: 617-428-7045  
;; TELEX:  
;; INFORMATION FOR SEQ ID NO: 7:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 442 amino acids  
;; TYPE: amino acid  
;; STRANDEDNESS: unknown  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: protein  
US-08-472-888A-7  
  
Query Match 100.0%; Score 1263; DB 4; Length 442;  
Best Local Similarity 100.0%; Pred. No. 1.4e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 211 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 270  
  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
DB 271 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 330  
  
QY 121 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 180  
DB 331 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 390  
  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNYHTOKSLSLSPGK 232  
DB 391 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNYHTOKSLSLSPGK 442  
  
RESULT 16  
PCT-US96-10043-9  
Sequence 9, Application PC/TUS9610043  
GENERAL INFORMATION:  
APPLICANT: The General Hospital Corporation  
TITLE OF INVENTION: P-SELECTIN LIGANDS AND RELATED MOLECULES  
TITLE OF INVENTION: AND METHODS  
NUMBER OF SEQUENCES: 14  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: USA  
ZIP: 02210-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US96/10043  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/000,213  
FILING DATE: 14-JUN-1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Lech, Karen F.  
REGISTRATION NUMBER:  
REFERENCE/DOCKET NUMBER: 00786/284001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 442 amino acids  
TYPE: amino acid  
STRANDEDNESS: not relevant  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
PCT-US96-10043-9

Query Match 100.0%; Score 1263; DB 5; Length 442;  
Best Local Similarity 100.0%; Pred. No. 1.4e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 211 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 270

QY 61 NWYDVGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
DB 271 NWYDVGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 330

QY 121 ISKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 180  
DB 331 ISKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 390

QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSNVMEALHNNHYTKLSLSLSPGK 232  
DB 391 PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSNVMEALHNNHYTKLSLSLSPGK 442

RESULT 17  
US-08-397-411-7  
Sequence 7, Application US/08397411  
Patent No. 6129914  
GENERAL INFORMATION:  
APPLICANT: Weiner, George  
APPLICANT: Gingrich, Roger  
APPLICANT: Link, Brian  
APPLICANT: Tso, J. Yun  
TITLE OF INVENTION: Bispecific Antibody Effective to Treat  
TITLE OF INVENTION: B-Cell Lymphoma and Cell Line  
NUMBER OF SEQUENCES: 14  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew  
STREET: One Market Plaza, Steuart Tower, Suite 2000  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94105  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/397,411  
FILING DATE: 01-MAR-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/859,583  
FILING DATE: 27-MAR-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Smith, William M.  
REGISTRATION NUMBER: 30,223  
REFERENCE/DOCKET NUMBER: 011823-004901  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-326-2400  
TELEFAX: 415-326-2422  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 446 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-397-411-7

Query Match 100.0%; Score 1263; DB 3; Length 446;  
Best Local Similarity 100.0%; Pred. No. 1.4e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 215 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 274

QY 61 NWYDVGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
DB 275 NWYDVGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 334

QY 121 ISKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 180  
DB 335 ISKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 394

QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSNVMEALHNNHYTKLSLSLSPGK 232  
DB 395 PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSNVMEALHNNHYTKLSLSLSPGK 446

RESULT 18  
US-08-458-516-13  
Sequence 13, Application US/08458516  
Patent No. 5777085  
GENERAL INFORMATION:  
APPLICANT: Co, Man Sung  
APPLICANT: Tso, J. Yun  
TITLE OF INVENTION: Humanized Antibodies Reactive with  
TITLE OF INVENTION: GPIIB/IIIA  
NUMBER OF SEQUENCES: 23  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: William M. Smith  
STREET: One Market Plaza, Steuart Tower, Suite 2000  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94105  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/458,516  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/059,159  
FILING DATE: 03-MAY-1993  
ATTORNEY/AGENT INFORMATION:

```

; NAME: Smith, William M.
; REGISTRATION NUMBER: 30, 223
; REFERENCE/DOCKET NUMBER: 11823-37-3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 449 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-458-516-13

Query Match 100.0%; Score 1263; DB 1; Length 449;
Best Local Similarity 100.0%; Pred. No. 1.4e-119;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 218 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLTLMISRTPEVTCVVDVSHEDPEVKF 277
QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNGKEYCKVSNKALPAPIEKT 120
DB 278 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNGKEYCKVSNKALPAPIEKT 337
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSGNQPNNTKPT 180
DB 338 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSGNQPNNTKPT 397
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
DB 398 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 449

RESULT 19
US-09-773-877B-16
; Sequence 16, Application US/09773877B
; Patent No. 6833349
; GENERAL INFORMATION:
; APPLICANT: Xia, Yu-Ping et al.
; TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
; FILE REFERENCE: REG 710b
; CURRENT APPLICATION NUMBER: US/09/773,877B
; CURRENT FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 16
; LENGTH: 452
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: F1t1(2-3 deltaB)-Fc
US-09-773-877B-16

Query Match 100.0%; Score 1263; DB 4; Length 452;
Best Local Similarity 100.0%; Pred. No. 1.4e-119;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 221 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLTLMISRTPEVTCVVDVSHEDPEVKF 280
QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNGKEYCKVSNKALPAPIEKT 120
DB 281 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNGKEYCKVSNKALPAPIEKT 340
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSGNQPNNTKPT 180
DB 341 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSGNQPNNTKPT 400
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
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DB 401 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 452

RESULT 20
US-08-157-101A-7
; Sequence 7, Application US/08157101A
; Patent No. 5808032
; GENERAL INFORMATION:
; APPLICANT: KURIHARA, TATSUYA
; APPLICANT: MATSUKURA, SHIGEKAZU
; APPLICANT: TSURUOKA, NOBUO
; APPLICANT: ARIMA, KENJI
; APPLICANT: NISHIHARA, TATSURO
; TITLE OF INVENTION: ANTI-HBS ANTIBODY GENES AND EXPRESSION
; TITLE OF INVENTION: PLASMIDS THEREFOR
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PILLSBURY, MADISON & SUTRO
; STREET: 1100 NEW YORK AVENUE, N.W.
; CITY: WASHINGTON
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/157,101A
; FILING DATE: 05-APR-1994
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: TITUS, MARLANA K
; REGISTRATION NUMBER: 35843
; REFERENCE/DOCKET NUMBER: 9437/204199
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-861-3711
; TELEFAX: 202-822-0944
; TELEX: 6714627 CUCH
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 459 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-157-101A-7

Query Match 100.0%; Score 1263; DB 1; Length 459;
Best Local Similarity 100.0%; Pred. No. 1.4e-119;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 228 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLTLMISRTPEVTCVVDVSHEDPEVKF 287
QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNGKEYCKVSNKALPAPIEKT 120
DB 288 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNGKEYCKVSNKALPAPIEKT 347
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSGNQPNNTKPT 180
DB 348 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSGNQPNNTKPT 407
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
DB 408 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 459

RESULT 21
US-09-773-877B-18
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; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-030-175-42

Query Match 100.0%; Score 1263; DB 4; Length 467;  
Best Local Similarity 100.0%; Pred. No. 1.5e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 236 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 295  
Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
Db 296 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 355  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTT 180  
Db 356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTT 415  
Qy 181 PVLDSGGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 232  
Db 416 PVLDSGGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 467

## RESULT 24

US-09-740-002-27  
Sequence 27, Application US/09740002  
Patent No. 6537809

; GENERAL INFORMATION:  
; APPLICANT: MORROW, PHILLIP

; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES  
; TITLE OF INVENTION: SPECIFIC TO RSV P-PROTEIN AND METHODS FOR THEIR  
; TITLE OF INVENTION: MANUFACTURE AND THERAPEUTIC USE THEREOF  
; FILE REFERENCE: 037003-0275759

; CURRENT APPLICATION NUMBER: US/09740,002  
; CURRENT FILING DATE: 2000-12-20

; PRIOR APPLICATION NUMBER: 09/335,697  
; PRIOR FILING DATE: 1999-06-18

; PRIOR APPLICATION NUMBER: 08/488,376  
; PRIOR FILING DATE: 1995-06-07

; NUMBER OF SEQ ID NOS: 27  
; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 27  
; LENGTH: 475

; TYPE: PRT  
; ORGANISM: Homo sapiens

US-09-740-002-27

Query Match 100.0%; Score 1263; DB 4; Length 475;  
Best Local Similarity 100.0%; Pred. No. 1.5e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 244 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 303  
Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
Db 304 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 363  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTT 180  
Db 364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTT 423  
Qy 181 PVLDSGGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 232  
Db 424 PVLDSGGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 475

## RESULT 25

US-08-378-939-10

; Sequence 10, Application US/08378939  
; Patent No. 5876961  
; GENERAL INFORMATION:  
; APPLICANT: CROWE, JAMES SCOTT  
; APPLICANT: LEWIS, ALAN PETER  
; TITLE OF INVENTION: PRODUCTION OF ANTIBODIES  
; NUMBER OF SEQUENCES: 46  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: ROTHWELL, FIGG, ERNST & KURZ  
; STREET: 555 THIRTEENTH ST. N.W.  
; CITY: WASHINGTON  
; STATE: D. C.  
; COUNTRY: U.S.  
; ZIP: 20004  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/378,939  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/952640  
; FILING DATE: 01-DEC-1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: ERNST, BARBARA G  
; REGISTRATION NUMBER: 30,377  
; REFERENCE/DOCKET NUMBER: 1808-118  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (202) 783-6040  
; TELEFAX: (202) 783-6031  
; INFORMATION FOR SEQ ID NO: 10:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 476 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-378-939-10

Query Match 100.0%; Score 1263; DB 2; Length 476;  
Best Local Similarity 100.0%; Pred. No. 1.5e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 245 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 304  
Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
Db 305 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 364  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTT 180  
Db 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTT 424  
Qy 181 PVLDSGGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 232  
Db 425 PVLDSGGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 476

## RESULT 26

US-08-487-550-4  
Sequence 4, Application US/08487550  
Patent No. 6113898

; GENERAL INFORMATION:  
; APPLICANT: Anderson, Darrell R.

; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF.

; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"  
; NUMBER OF SEQUENCES: 12

;; CORRESPONDENCE ADDRESS:  
;; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
;; STREET: 699 Prince Street  
;; CITY: Alexandria  
;; STATE: VA  
;; COUNTRY: USA  
;; ZIP: 22314  
;;  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: Floppy disk  
;; COMPUTER: IBM PC compatible  
;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: Patent In Release #1.0, Version #1.30  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/487,550  
;; FILING DATE: 07-JUN-1995  
;; CLASSIFICATION: 435  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Teskin, Robin L.  
;; REGISTRATION NUMBER: 35,030  
;; REFERENCE/DOCKET NUMBER: 012712-131  
;; TELEPHONE: 703-836-6620  
;; TELEFAX: 703-836-2021  
;; INFORMATION FOR SEQ ID NO: 4:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 476 amino acids  
;; TYPE: amino acid  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: protein  
;;  
US-08-487-550-4

Query Match 100.0%; Score 1263; DB 3; Length 476;  
Best Local Similarity 100.0%; Pred. No. 1.5e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
|||  
DB 245 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304  
|||

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
|||  
DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364  
|||

QY 121 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
|||  
DB 365 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 424  
|||

QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
|||  
DB 425 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 476  
|||

RESULT 27  
US-08-487-550-12  
; Sequence 12, Application US/08487550  
; Patent No. 6113898  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Darrell R.  
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
; TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,  
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
; IMMUNOSUPPRESSANTS"  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
; STREET: 699 Prince Street  
; CITY: Alexandria  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22314  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/487,550  
; FILING DATE: 07-JUN-1995  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Teskin, Robin L.  
; REGISTRATION NUMBER: 35,030  
; REFERENCE/DOCKET NUMBER: 012712-131  
; TELEPHONE: 703-836-6620  
; TELEFAX: 703-836-2021  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 476 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/487,550  
; FILING DATE: 07-JUN-1995  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Teskin, Robin L.  
; REGISTRATION NUMBER: 35,030  
; REFERENCE/DOCKET NUMBER: 012712-131  
; TELEPHONE: 703-836-6620  
; TELEFAX: 703-836-2021  
; INFORMATION FOR SEQ ID NO: 12:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 476 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/526,098  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 09/383,916  
; FILING DATE:  
; APPLICATION NUMBER: US 08/487,550

;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: Patent In Release #1.0, Version #1.30  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/487,550  
;; FILING DATE: 07-JUN-1995  
;; CLASSIFICATION: 435  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Teskin, Robin L.  
;; REGISTRATION NUMBER: 35,030  
;; REFERENCE/DOCKET NUMBER: 012712-131  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: 703-836-6620  
;; TELEFAX: 703-836-2021  
;; INFORMATION FOR SEQ ID NO: 12:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 476 amino acids  
;; TYPE: amino acid  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: protein  
;;  
US-08-487-550-12

Query Match 100.0%; Score 1263; DB 3; Length 476;  
Best Local Similarity 100.0%; Pred. No. 1.5e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
|||  
DB 245 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304  
|||

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
|||  
DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364  
|||

QY 121 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
|||  
DB 365 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 424  
|||

QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
|||  
DB 425 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 476  
|||

RESULT 28  
US-09-526-098-4  
; Sequence 4, Application US/09526098  
; Patent No. 6492134  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Darrell R.  
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
; TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,  
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
; IMMUNOSUPPRESSANTS"  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
; STREET: 699 Prince Street  
; CITY: Alexandria  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22314  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/526,098  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 09/383,916  
; FILING DATE:  
; APPLICATION NUMBER: US 08/487,550

```
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 476 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-526-098-4

Query Match 100.0%; Score 1263; DB 4; Length 476;
Best Local Similarity 100.0%; Pred. No. 1.5e-119;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 245 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFPSDIAVEWESNGQPENNYKTP 180
Db 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFPSDIAVEWESNGQPENNYKTP 424

Qy 181 PVLDSGDFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232
Db 425 PVLDSGDFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 476

RESULT 29
US-09-526-098-12
; Sequence 12, Application US/09526098
; Patent No. 6492134
; GENERAL INFORMATION:
; APPLICANT: Anderson, Darrell R.
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF.
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
; STREET: 699 Prince Street
; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/526,098
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/383,916
; FILING DATE:
; APPLICATION NUMBER: US 08/487,550
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 476 amino acids
; TYPE: amino acid
; REFERENCE/DOCKET NUMBER: 012712-131
```

```
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 476 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-526-098-12

Query Match 100.0%; Score 1263; DB 4; Length 476;
Best Local Similarity 100.0%; Pred. No. 1.5e-119;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 245 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFPSDIAVEWESNGQPENNYKTP 180
Db 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFPSDIAVEWESNGQPENNYKTP 424

Qy 181 PVLDSGDFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232
Db 425 PVLDSGDFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 476

RESULT 30
US-09-383-916-4
; Sequence 4, Application US/09383916
; Patent No. 6709654
; GENERAL INFORMATION:
; APPLICANT: Anderson, Darrell R.
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF.
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
; STREET: 699 Prince Street
; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/383,916
; FILING DATE: 26-AUG-1999
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/487,550
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 476 amino acids
; TYPE: amino acid
```

TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-09-383-916-4

Query Match 100.0%; Score 1263; DB 4; Length 476;  
Best Local Similarity 100.0%; Pred. No. 1.5e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 245 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

QY 61 NWYDGVVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 305 NWYDGVVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 365 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 424

QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK 232  
DB 425 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK 476

RESULT 31  
US-09-383-916-12  
Sequence 12, Application US/09383916  
Patent No. 6709654  
GENERAL INFORMATION:  
APPLICANT: Anderson, Darrell R.  
TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF.  
TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
TITLE OF INVENTION: IMMUNOSUPPRESSANTS"  
NUMBER OF SEQUENCES: 12  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
STREET: 699 Prince Street  
CITY: Alexandria  
STATE: VA  
COUNTRY: USA  
ZIP: 22314  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION NUMBER: US/09/383,916  
FILING DATE: 26-AUG-1999  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/487,550  
FILING DATE: 07-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Teskin, Robin L.  
REGISTRATION NUMBER: 35,030  
REFERENCE/DOCKET NUMBER: 012712-131  
TELEPHONE: 703-836-6620  
TELEFAX: 703-836-2021  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 476 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-09-383-916-12

Query Match 100.0%; Score 1263; DB 4; Length 476;  
Best Local Similarity 100.0%; Pred. No. 1.5e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 245 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

QY 61 NWYDGVVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 305 NWYDGVVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 365 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 424

QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK 232  
DB 425 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK 476

RESULT 32  
US-08-487-550-8  
Sequence 8, Application US/08487550  
Patent No. 6113898  
GENERAL INFORMATION:  
APPLICANT: Anderson, Darrell R.  
TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF.  
TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
TITLE OF INVENTION: IMMUNOSUPPRESSANTS"  
NUMBER OF SEQUENCES: 12  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
STREET: 699 Prince Street  
CITY: Alexandria  
STATE: VA  
COUNTRY: USA  
ZIP: 22314  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION NUMBER: US/08/487,550  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Teskin, Robin L.  
REGISTRATION NUMBER: 35,030  
REFERENCE/DOCKET NUMBER: 012712-131  
TELEPHONE: 703-836-6620  
TELEFAX: 703-836-2021  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 478 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-487-550-8

Query Match 100.0%; Score 1263; DB 3; Length 478;  
Best Local Similarity 100.0%; Pred. No. 1.5e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 247 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 306

QY 61 NWYDGVVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 307 NWYDGVVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180

Db 367 ISKAGQPREPQVYTLPPSRDELTKQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 426  
Qy 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKQSLSPGK 232  
Db 427 PVLDSGDSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKQSLSPGK 478

RESULT 33  
US-09-526-098-8  
; Sequence 8, Application US/09526098  
; Patent No. 6492134  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Darrell R.  
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
; TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF.  
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
; STREET: 699 Prince Street  
; CITY: Alexandria  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22314  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/526,098  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 09/383,916  
; FILING DATE:  
; APPLICATION NUMBER: US 08/487,550  
; FILING DATE: 07-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Teskin, Robin L.  
; REGISTRATION NUMBER: 35,030  
; REFERENCE/DOCKET NUMBER: 012712-131  
; TELEPHONE: 703-836-6620  
; TELEFAX: 703-836-6620  
; INFORMATION FOR SEQ ID NO: 8:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 478 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; US-09-526-098-8

Query Match 100.0%; Score 1263; DB 4; Length 478;  
Best Local Similarity 100.0%; Pred. No. 1.5e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 247 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 306  
Qy 61 NWVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEVESNGQPENNYKTP 120  
Db 307 NWVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEVESNGQPENNYKTP 366  
Qy 121 ISKAGQPREPQVYTLPPSRDELTKQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180  
Db 367 ISKAGQPREPQVYTLPPSRDELTKQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 426  
Qy 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKQSLSPGK 232  
Db 427 PVLDSGDSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKQSLSPGK 478

Db 427 PVLDSGDSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKQSLSPGK 478

RESULT 34  
US-09-383-916-8  
; Sequence 8, Application US/09383916  
; Patent No. 6709654  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Darrell R.  
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
; TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,  
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
; STREET: 699 Prince Street  
; CITY: Alexandria  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22314  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/383,916  
; FILING DATE: 26-AUG-1999  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/487,550  
; FILING DATE: 07-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Teskin, Robin L.  
; REGISTRATION NUMBER: 35,030  
; REFERENCE/DOCKET NUMBER: 012712-131  
; TELEPHONE: 703-836-6620  
; TELEFAX: 703-836-2021  
; INFORMATION FOR SEQ ID NO: 8:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 478 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; US-09-383-916-8

Query Match 100.0%; Score 1263; DB 4; Length 478;  
Best Local Similarity 100.0%; Pred. No. 1.5e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 247 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 306  
Qy 61 NWVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEVESNGQPENNYKTP 120  
Db 307 NWVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEVESNGQPENNYKTP 366  
Qy 121 ISKAGQPREPQVYTLPPSRDELTKQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180  
Db 367 ISKAGQPREPQVYTLPPSRDELTKQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 426  
Qy 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKQSLSPGK 232  
Db 427 PVLDSGDSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKQSLSPGK 478

RESULT 35  
US-09-499-846-6  
; Sequence 6, Application US/09499846  
; Patent No. 6656728



```
; OTHER INFORMATION: Flt1(1-3 deltaB)-Fc (Mut1)
US-09-773-877B-14

Query Match      100.0%; Score 1263; DB 4; Length 567;
Best Local Similarity 100.0%; Pred. No. 1.9e-119;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 326 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 385

Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGYFSDIAVEWESNGQPENNYKTTP 120
Db 386 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGYFSDIAVEWESNGQPENNYKTTP 445

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFSDIAVEWESNGQPENNYKTTP 180
Db 446 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFSDIAVEWESNGQPENNYKTTP 505

Qy 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 506 PVLDSGSPFLYSLKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 557

RESULT 39
US-09-825-561A-16
; Sequence 16, Application US/09825561A
; Patent No. 677539
; GENERAL INFORMATION:
; APPLICANT: Sprecher, Cindy A.
; APPLICANT: No. 677539ak, Julia E.
; APPLICANT: West, James W.
; APPLICANT: Presnell, Scott R.
; APPLICANT: Holly, Richard D.
; APPLICANT: Nelson, Andrew J.
; TITLE OF INVENTION: SOLUBLE ZALPHA11 CYTOKINE RECEPTORS
; FILE REFERENCE: 00-22
; CURRENT APPLICATION NUMBER: US/09/825,561A
; CURRENT FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/194,731
; PRIOR FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/222,121
; PRIOR FILING DATE: 2000-07-28
; NUMBER OF SEQ ID NOS: 86
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 567
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: soluble zalpha11/IgGgamma1 polypeptide
US-09-825-561A-16

Query Match      100.0%; Score 1263; DB 4; Length 567;
Best Local Similarity 100.0%; Pred. No. 1.9e-119;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 336 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 395

Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGYFSDIAVEWESNGQPENNYKTTP 120
Db 396 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGYFSDIAVEWESNGQPENNYKTTP 455

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFSDIAVEWESNGQPENNYKTTP 180
Db 456 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFSDIAVEWESNGQPENNYKTTP 515

Qy 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 516 PVLDSGSPFLYSLKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 567

; OTHER INFORMATION: Flt1(1-3 deltaB)-Fc (Mut1)
US-09-773-877B-12

Query Match      100.0%; Score 1263; DB 4; Length 567;
Best Local Similarity 100.0%; Pred. No. 1.9e-119;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 336 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 395

Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGYFSDIAVEWESNGQPENNYKTTP 120
Db 396 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGYFSDIAVEWESNGQPENNYKTTP 455

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFSDIAVEWESNGQPENNYKTTP 180
Db 456 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFSDIAVEWESNGQPENNYKTTP 515

Qy 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 516 PVLDSGSPFLYSLKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 567

; OTHER INFORMATION: Flt1(1-3 R->N)-Fc (Mut4)
US-09-773-877B-20

Query Match      100.0%; Score 1263; DB 4; Length 567;
Best Local Similarity 100.0%; Pred. No. 1.9e-119;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 336 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 395

Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGYFSDIAVEWESNGQPENNYKTTP 120
Db 396 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGYFSDIAVEWESNGQPENNYKTTP 455
```

QY 121 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSDIAVEWESNGQPENNYKTTTP 180  
| | | | |  
Db 456 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSDIAVEWESNGQPENNYKTTTP 515  
| | | | |  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232  
| | | | |  
Db 516 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 567  
| | | | |

## RESULT 42

US-09-746-359A-53  
; Sequence 53, Application US/09746359A  
; Patent No. 6610286  
; GENERAL INFORMATION:  
; APPLICANT: Thompson, Penny  
; APPLICANT: Foster, Donald C.  
; APPLICANT: Xu, Wenfeng  
; APPLICANT: Madden, Karen L.  
; APPLICANT: Kelly, James D.  
; APPLICANT: Sprecher, Cindy A.  
; APPLICANT: Blumberg, Hal  
; APPLICANT: Eagan, Maribeth A.  
; APPLICANT: Jaspers, Stephen R.  
; APPLICANT: Chandrasekher, Yasmin A.  
; APPLICANT: No. 6610286ak, Julia E.  
; TITLE OF INVENTION: Method for Treating Inflammation  
; FILE REFERENCE: 99-108  
; CURRENT APPLICATION NUMBER: US/09/746,359A  
; CURRENT FILING DATE: 2001-05-21  
; PRIOR APPLICATION NUMBER: 60/171,969  
; PRIOR FILING DATE: 1999-12-23  
; PRIOR APPLICATION NUMBER: 60/213,341  
; PRIOR FILING DATE: 2000-06-22  
; NUMBER OF SEQ ID NOS: 72  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 53  
; LENGTH: 571  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-746-359A-53

Query Match 100.0%; Score 1263; DB 4; Length 571;  
Best Local Similarity 100.0%; Pred. No. 2e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
| | | | |  
Db 340 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 399  
| | | | |  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
| | | | |  
Db 400 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 459  
| | | | |  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSDIAVEWESNGQPENNYKTTTP 180  
| | | | |  
Db 460 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSDIAVEWESNGQPENNYKTTTP 519  
| | | | |  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232  
| | | | |  
Db 520 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 571  
| | | | |

## RESULT 43

US-09-313-942-8  
; Sequence 8, Application US/09313942  
; Patent No. 6472179  
; GENERAL INFORMATION:  
; APPLICANT: REGENERON PHARMACEUTICALS, INC.  
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING  
; FILE REFERENCE: REG 203-A  
; CURRENT APPLICATION NUMBER: US/09/313,942

; CURRENT FILING DATE: 1999-05-19  
; PRIOR APPLICATION NUMBER: 09/313,942  
; PRIOR FILING DATE: 1999-05-19  
; PRIOR APPLICATION NUMBER: 60/101,858  
; PRIOR FILING DATE: 1998-09-25  
; NUMBER OF SEQ ID NOS: 32  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 8  
; LENGTH: 592  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-313-942-8

Query Match 100.0%; Score 1263; DB 4; Length 592;  
Best Local Similarity 100.0%; Pred. No. 2.1e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
| | | | |  
Db 361 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 420  
| | | | |  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
| | | | |  
Db 421 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 480  
| | | | |  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSDIAVEWESNGQPENNYKTTTP 180  
| | | | |  
Db 481 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSDIAVEWESNGQPENNYKTTTP 540  
| | | | |  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232  
| | | | |  
Db 541 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 592  
| | | | |

## RESULT 44

US-09-499-846-2  
; Sequence 2, Application US/09499846  
; Patent No. 6656728  
; GENERAL INFORMATION:  
; APPLICANT: Kavanaugh et al.  
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR  
; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION  
; FILE REFERENCE: 035784/195012 (5784-  
; CURRENT APPLICATION NUMBER: US/09/499,846  
; CURRENT FILING DATE: 2000-02-07  
; NUMBER OF SEQ ID NOS: 12  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 622  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-499-846-2

Query Match 100.0%; Score 1263; DB 4; Length 622;  
Best Local Similarity 100.0%; Pred. No. 2.2e-119;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
| | | | |  
Db 391 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 450  
| | | | |  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
| | | | |  
Db 451 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 510  
| | | | |  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSDIAVEWESNGQPENNYKTTTP 180  
| | | | |  
Db 511 ISKAKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSDIAVEWESNGQPENNYKTTTP 570  
| | | | |  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232  
| | | | |  
Db 571 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 622  
| | | | |

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RESULT 45
US-09-313-942-7
; Sequence 7, Application US/09313942
; Patent No. 6472179
; GENERAL INFORMATION:
; APPLICANT: REGENERON PHARMACEUTICALS, INC.
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
; FILE REFERENCE: REG 203-A
; CURRENT APPLICATION NUMBER: US/09/313,942
; PRIOR FILING DATE: 1999-05-19
; PRIOR FILING DATE: 1999-05-19
; PRIOR FILING DATE: 1999-05-19
; PRIOR FILING DATE: 1998-09-25
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 859
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-313-942-7

Query Match      100.0%; Score 1263; DB 4; Length 859;
Best Local Similarity 100.0%; Pred. No. 3.5e-119;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCCPPCAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 622 EPKSCDKHTCCPPCAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 681
QY 61 NWTVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 682 NWTVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 741
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 742 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 801
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232
DB 802 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 853

RESULT 46
US-09-313-942-9
; Sequence 9, Application US/09313942
; Patent No. 6472179
; GENERAL INFORMATION:
; APPLICANT: REGENERON PHARMACEUTICALS, INC.
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
; FILE REFERENCE: REG 203-A
; CURRENT APPLICATION NUMBER: US/09/313,942
; PRIOR FILING DATE: 1999-05-19
; PRIOR FILING DATE: 1999-05-19
; PRIOR FILING DATE: 1999-05-19
; PRIOR FILING DATE: 1998-09-25
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 951
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-313-942-9

Query Match      100.0%; Score 1263; DB 4; Length 951;
Best Local Similarity 100.0%; Pred. No. 4.1e-119;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCCPPCAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60
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DB 780 NWTVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 839
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 840 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 899
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232
DB 900 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 951

Search completed: February 10, 2005, 06:43:40
Job time : 46 secs
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GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: February 10, 2005, 05:40:01 ; Search time 9.56701 Seconds  
(without alignments)  
2333.257 Million cell updates/sec

Title: US-10-617-619A-7

Perfect score: 1263  
Sequence: 1 EPKSCDKTHTCPPAPPELL.....MHEALHNYTQKSLSLSPGK 232

Scoring table: BLOSUM62DX  
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : PIR 79:\*  
1: pir1:\*  
2: pir2:\*  
3: pir3:\*  
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Match	Length	DB ID	Description
1	1263	100.0	330	1 GHU	Ig gamma-1 chain C
2	1257	99.5	374	2 S69339	Ig heavy chain V x
3	1255	99.4	255	4 S31866	Ig gamma-1 chain C
4	1210	95.8	234	2 PT0207	Ig gamma chain C r
5	1176	93.1	377	2 A23511	Ig gamma-3 chain C
6	1174	93.0	377	2 A60764	Ig gamma-3 chain C
7	1151	91.1	289	1 G3HUMI	Ig gamma-3 heavy c
8	1145	90.7	326	1 G2HU	Ig gamma-2 chain C
9	1135	89.9	327	1 GHU	Ig gamma-4 chain C
10	921	72.9	323	1 GHR	Ig gamma chain C r
11	906.5	71.8	328	2 I47160	Ig gamma 2b chain
12	906.5	71.8	328	2 I47159	Ig gamma 2a chain
13	903	71.5	277	2 I47162	Ig gamma 4 chain C
14	896	70.9	329	1 G2GP	Ig gamma-2 chain C
15	885.5	70.1	328	2 I47158	Ig gamma 1 chain c
16	878.5	69.6	328	2 I47161	Ig gamma 3 chain c
17	856	67.8	470	2 S22080	Ig heavy chain pre
18	847.5	67.1	308	2 C30554	Ig heavy chain C r
19	847.5	67.1	472	2 S31459	Ig gamma-1 chain -
20	845.5	66.9	329	1 G3MSC	Ig gamma-3 chain C
21	842	66.7	333	2 PS0018	Ig gamma-2b chain
22	834.5	66.1	398	1 G3MSM	Ig gamma-3 chain C
23	832.5	65.9	444	2 PC4436	monoclonal antibod
24	822.5	65.1	324	1 GIMS	Ig gamma-1 chain C
25	822.5	65.1	326	2 PS0017	Ig gamma-1 chain C
26	817.5	64.7	393	1 GLMSW	Ig gamma-2c chain
27	809.5	64.1	329	2 S00847	Ig gamma-2a chain
28	809	64.1	330	1 G2MSA	Ig gamma-2a chain
29	809	64.1	469	2 S37483	Ig gamma-2a chain

Ig gamma-2a chain  
Ig gamma-2a chain  
Ig gamma-2a chain  
Ig gamma-2a chain  
Ig gamma-2b chain  
Ig gamma-2b chain  
Ig gamma-2 chain C  
Ig gamma-2b chain  
Ig gamma-2b chain  
Ig heavy chain VHI  
Ig heavy chain V-I  
Ig gamma-1 chain C  
Ig Y heavy chain (C  
Ig heavy chain pre  
Ig mu chain C regi  
Ig mu chain C regi

## ALIGNMENTS

### RESULT 1

GHU

Ig gamma-1 chain C region - human

C;Species: Homo sapiens (man)

C;Date: 31-Jan-1981 #sequence revision 18-Aug-1982 #text\_change 09-Jul-2004  
C;Accession: A93433; S33887; B90563; A90564; B91668; A91723; A02146

R;Ellison, J.W.; Berson, B.J.; Hood, L.E.

Nucleic Acids Res. 10, 4071-4079, 1982

A;Title: The nucleotide sequence of a human immunoglobulin C-gamma gene.

A;Reference number: A93433; MUID:82274238; PMID:6287432

A;Accession: A93433

A;Molecule type: DNA

A;Residues: 1-330 <ELL>

A;Cross-references: UNIPROT:P01857; EMBL:Z17370

A;Note: this sequence has the Gln(17) allotypic marker, 97-Lys, and the Gln(11) markers,

A;Note: Lys-330 is removed after translation

R;Harris, L.J.

submitted to the EMBL Data Library, October 1992

A;Reference number: S33904

A;Accession: S36861

A;Molecule type: DNA

A;Residues: 2-330 <HAR>

A;Cross-references: EMBL:Z17370

R;Takahashi, N.; Ueda, S.; Obata, M.; Nikaide, T.; Nakai, S.; Honjo, T.

Cell 29, 671-679, 1982

A;Title: Structure of human immunoglobulin gamma genes: implications for evolution of a

A;Reference number: S33887; MUID:83001943; PMID:681139

A;Accession: S33887

A;Molecule type: DNA

A;Residues: 88-113;235-330 <TAK>

A;Cross-references: EMBL:Z17370

R;Cunningham, B.A.; Rutishauser, U.; Gall, W.E.; Gottlieb, P.D.; Waxdal, M.J.; Edelman,

Biochemistry 9, 3161-3170, 1970

A;Title: The covalent structure of a human gammaG-immunoglobulin. VII. Amino acid sequ

A;Reference number: A90563; MUID:71064024; PMID:5489771

A;Contents: myeloma protein Eu

A;Accession: B90563

A;Molecule type: protein

A;Residues: 1-96,'R',98-135 <CUN>

A;Note: this sequence has the Gln(3) marker, 97-Arg

R;Rutishauser, U.; Cunningham, B.A.; Bennett, C.; Konigsberg, W.H.; Edelman, G.M.

Biochemistry 9, 3171-3181, 1970

A;Title: The covalent structure of a human gammaG-immunoglobulin. VIII. Amino acid sequ

A;Reference number: A90564; MUID:71064025; PMID:5530842

A;Contents: Eu

A;Accession: A90564

A;Molecule type: protein

A;Residues: 136-154,'Q',156-165,'Q',178-194,'N',196-197,'D',199-238,'E',240

A;Note: this sequence has the Gln(non-1) markers, 239-Glu and 241-Met

R;Ponstingl, H.; Hilschmann, N.

Hoppe-Seyler's Z. Physiol. Chem. 357, 1571-1604, 1976

A;Title: Die Primaerstruktur eines monoklonalen IgG1-Immunglobulins (Myelomprotein Nie)

## igen Primaerstruktur.

A;Reference number: A91668; MUID:77070269; PMID:826475  
A;Contents: myeloma protein Nie  
A;Accession: B91668  
A;Molecule type: protein  
A;Residues: 1-34, Q, 36-96, 'K', 98-115, 'Q', 117-197, 'D', 199-238, 'D', 240, 'L', 242-268, 'E', 270-288, 'D', 290-310, 'E', 312-314, 'D', 316-318, 'E', 320-322, 'D', 324-326, 'E', 328-330, 'D', 332-334, 'E', 336-338, 'D', 340-342, 'E', 344-346, 'D', 348-350, 'E', 352-354, 'D', 356-358, 'E', 360-362, 'D', 364-366, 'E', 368-370, 'D', 372-374, 'E', 376-378, 'D', 380-382, 'E', 384-386, 'D', 388-390, 'E', 392-394, 'D', 396-398, 'E', 400-402, 'D', 404-406, 'E', 408-410, 'D', 412-414, 'E', 416-418, 'D', 420-422, 'E', 424-426, 'D', 428-430, 'E', 432-434, 'D', 436-438, 'E', 440-442, 'D', 444-446, 'E', 448-450, 'D', 452-454, 'E', 456-458, 'D', 460-462, 'E', 464-466, 'D', 468-470, 'E', 472-474, 'D', 476-478, 'E', 480-482, 'D', 484-486, 'E', 488-490, 'D', 492-494, 'E', 496-498, 'D', 500-502, 'E', 504-506, 'D', 508-510, 'E', 512-514, 'D', 516-518, 'E', 520-522, 'D', 524-526, 'E', 528-530, 'D', 532-534, 'E', 536-538, 'D', 540-542, 'E', 544-546, 'D', 548-550, 'E', 552-554, 'D', 556-558, 'E', 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3096-3098, 'D', 3100-3102, 'E', 3104-3106, 'D', 3108-3110, 'E', 3112-3114, 'D', 3116-3118, 'E', 3120-3122, 'D', 3124-3126, 'E', 3128-3130, 'D', 3132-3134, 'E', 3136-3138, 'D', 3140-3142, 'E', 3144-3146, 'D', 3148-3150, 'E', 3152-3154, 'D', 3156-3158, 'E', 3160-3162, 'D', 3164-3166, 'E', 3168-3170, 'E', 3172-3174, 'D', 3176-3178, 'E', 3180-3182, 'D', 3184-3186, 'E', 3188-3190, 'D', 3192-3194, 'E', 3196-3198, 'D', 3200-3202, 'E', 3204-3206, 'D', 3208-3210, 'E', 3212-3214, 'D', 3216-3218, 'E', 3220-3222, 'D', 3224-3226, 'E', 3228-3230, 'D', 3232-3234, 'E', 3236-3238, 'D', 3240-3242, 'E', 3244-3246, 'D', 3248-3250, 'E', 3252-3254, 'D', 3256-3258, 'E', 3260-3262, 'D', 3264-3266, 'E', 3268-3270, 'E', 3272-3274, 'D', 3276-3278, 'E', 3280-3282, 'D', 3284-3286, 'E', 3288-3290, 'D', 3292-3294, 'E', 3296-3298, 'D', 3300-3302, 'E', 3304-3306, 'D', 3308-3310, 'E', 3312-3314, 'D', 3316-3318, 'E', 3320-3322, 'D', 3324-3326, 'E', 3328-3330, 'D', 3332-3334, 'E', 3336-3338, 'D', 3340-3342, 'E', 3344-3346, 'D', 3348-3350, 'E', 3352-3354, 'D', 3356-3358, 'E', 3360-3362, 'D', 3364-3366, 'E', 3368-3370, 'E', 3372-3374, 'D', 3376-3378, 'E', 3380-3382, 'D', 3384-3386, 'E', 3388-3390, 'D', 3392-3394, 'E', 3396-3398, 'D', 3400-3402, 'E', 3404-3406, 'D', 3408-3410, 'E', 3412-3414, 'D', 3416-3418, 'E', 3420-3422, 'D', 3424-3426, 'E', 3428-3430, 'D', 3432-3434, 'E', 3436-3438, 'D', 3440-3442, 'E', 3444-3446, 'D', 3448-3450, 'E', 3452-3454, 'D', 3456-3458, 'E', 3460-3462, 'D', 3464-3466, 'E', 3468-3470, 'E', 3472-3474, 'D', 3476-3478, 'E', 3480-3482, 'D', 3484-3486, 'E', 3488-3490, 'D', 3492-3494, 'E', 3496-3498, 'D', 3500-3502, 'E', 3504-3506, 'D', 3508-3510, 'E', 3512-3514, 'D', 3516-3518, 'E', 3520-3522, 'D', 3524-3526, 'E', 3528-3530, 'D', 3532-3534, 'E', 3536-3538, 'D', 3540-3542, 'E', 3544-3546, 'D', 3548-3550, 'E', 3552-3554, 'D', 3556-3558, 'E', 3560-3562, 'D', 3564-3566, 'E', 3568-3570, 'E', 3572-3574, 'D', 3576-3578, 'E', 3580-3582, 'D', 3584-3586, 'E', 3588-3590, 'D', 3592-3594, 'E', 3596-3598, 'D', 3600-3602, 'E', 3604-3606, 'D', 3608-3610, 'E', 3612-3614, 'D', 3616-3618, 'E', 3620-3622, 'D', 3624-3626, 'E', 3628-3630, 'D', 3632-3634, 'E', 3636-3638, 'D', 3640-3642, 'E', 3644-3646, 'D', 3648-3650, 'E', 3652-3654, 'D', 3656-3658, 'E', 3660-3662, 'D', 3664-3666, 'E', 3668-3670, 'E', 3672-3674, 'D', 3676-3678, 'E', 3680-3682, 'D', 3684-3686, 'E', 3688-3690, 'D', 3692-3694, 'E', 3696-3698, 'D', 3700-3702, 'E', 3704-3706, 'D', 3708-3710, 'E', 3712-3714, 'D', 3716-3718, 'E', 3720-3722, 'D', 3724-3726, 'E', 3728-3730, 'D', 3732-3734, 'E', 3736-3738, 'D', 3740-3742, 'E', 3744-3746, 'D', 3748-3750, 'E', 3752-3754, 'D', 3756-3758, 'E', 3760-3762, 'D', 3764-3766, 'E', 3768-3770, 'D', 3772-3774, 'E', 3776-3778, 'D', 3780-3782, 'E', 3784-3786, 'D', 3788-3790, 'E', 3792-3794, 'E', 3796-3798, 'D', 3800-3802, 'E', 3804-3806, 'D', 3808-3810, 'E', 3812-3814, 'D', 3816-3818, 'E', 3820-3822, 'D', 3824-3826, 'E', 3828-3830, 'D', 3832-3834, 'E', 3836-3838, 'D', 3840-3842, 'E', 3844-3846

<b>Qy</b>	181	PVLSDSGSFFLYSKLTVDKSRWQQGVFSCVMHEALHNHYTKLSLSPGK	232
<b>D<sub>b</sub></b>	204	PVLSDSGSFFLYSKLTVDKSRWQQGVFSCVMHEALHNHYTKLSLSPGK	255

A;Title: Primary structure of the 'hinge' region of human IgG3. Probable quadruplication  
A;Reference number: A92219; MUID:77118561; PMID:402363  
A;Contents: normal gamma-3 chains, sequence corresponding to residues 12-97 of protein W  
A;Accession: A92219  
A;Molecule type: protein  
A;Residues: 12-97 <MIC>  
A;Note: the hinge region in gamma-3 chains is about four times as long as in other gamma  
idue segment (12-28)  
A;Note: cysteines at positions 24, 27, 33, 39, 42, 48, 54, 57, 63, 69, and 72 form inter  
R;Wolfenstein-Todel, C.; Frangione, B.; Prelli, F.; Franklin, E.C.  
Biochem. Biophys. Res. Commun. 71, 907-914, 1976  
A;Title: The amino acid sequence of "heavy chain disease" protein ZUC. Structure of the  
A;Reference number: A90198; MUID:77021516; PMID:823945  
A;Contents: heavy chain disease protein Zuc, partial sequence corresponding to residues  
A;Accession: A90198  
A;Molecule type: protein  
A;Residues: 59-125, 'EB', 128-226, 228-289 <WOL>  
A;Note: this protein lacks most of the V region, all of the CH1 region, and part of the  
R;Alexander, A.; Steinmetz, M.; Barritault, D.; Frangione, B.; Franklin, E.C.; Hood, L.  
Proc. Natl. Acad. Sci. U.S.A. 79, 3260-3264, 1982  
A;Title: gamma heavy chain disease in man: cDNA sequence supports partial gene deletion  
A;Reference number: A93915; MUID:82247835; PMID:6808505  
A;Contents: heavy chain disease protein Omn  
A;Accession: A93915  
A;Molecule type: mRNA  
A;Residues: 12-70;72-114;116-125, 'E', 127-133, 'L', 135-136, 'E', 138, 'Y', 140-154, 'D', 156-157  
A;Note: a carboxyl-terminal Lys is removed posttranslationally  
A;Note: this sequence may represent an allelic form or another gamma chain subclass  
C;Comment: The heavy chain disease protein Wis is shown.  
C;Genetics:  
A;Gene: GDB:IGHG3  
A;Cross-references: GDB:119339; OMIM:147120  
A;Map position: 14q32.33-14q32.33  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
C;Keywords: duplication; glycoprotein; immunoglobulin; pyroglyutamic acid  
F;1/Modified site: immunoglobulin homology <IMM>  
F;1/Modified site: pyroglutamic acid (Gln) #status experimental  
F;6,140/Binding site: carbohydrate (Asn) (covalent) #status experimental

Query Match 91.1%; Score 1151; DB 1; Length 289;  
Best Local Similarity 90.5%; Pred. No. 6.7e-81;  
Matches 209; Conservative 13; Mismatches 9; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGSPVFLFPKPKDILMISRTPEVTCVVDVSHEDPEVKF 60  
DB 59 EPKSCDTPPCPCPAPELLGSPVFLFPKPKDILMISRTPEVTCVVDVSHEDPEVKF 118  
QY 61 NWYVDGVEVHNATKPREQYNSTYRVSVLTVLVHQLDGLNGKEYCKVSNKALPAPIEKT 120  
DB 119 KWTVDGVQVHNATKPREQYNSTYRVSVLTVLVHQLDGLNGKEYCKVSNKALPAPIEKT 178  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180  
DB 179 ISKTKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 238  
QY 181 PVLDSGDFLYSKLTVDKSRWQGNVFCVSNVHEALHNHYTQKSLSLSPG 231  
DB 239 PMLDSGDFLYSKLTVDKSRWQGNVFCVSNVHEALHNHYTQKSLSLSPG 289

RESULT 8  
G2HU  
IG gamma-2 chain C region - human  
C;Species: Homo sapiens (man)  
C;Date: 30-Apr-1981 #sequence revision 13-Jun-1983 #text\_change 09-Jul-2004  
C;Accession: A93906; A92809; A90752; A93132; A02148  
R;Ellison, J.; Hood, L.  
Proc. Natl. Acad. Sci. U.S.A. 79, 1984-1988, 1982  
A;Title: Linkage and sequence homology of two human immunoglobulin gamma heavy chain con  
A;Reference number: A93906; MUID:82157621; PMID:6804948  
A;Accession: A93906  
A;Molecule type: DNA  
A;Residues: 1-326 <ELL>

A;Cross-references: UNIPROT:P01859; GB:V00554; GB:J00230; NID:G32759; PIDN:CAB58438.1; I  
A;Note: Lys-326 is probably removed posttranslationally  
R;Wang, A.C.; Tung, E.; Fudenberg, H.H.  
J. Immunol. 125, 1048-1054, 1980  
A;Title: The primary structure of a human IgG2 heavy chain: genetic, evolutionary, and  
A;Reference number: A92809; MUID:81007873; PMID:6774012  
A;Contents: myeloma protein Til  
A;Accession: A92809  
A;Molecule type: protein  
A;Residues: 1-19, 'Q', 21-57, 'Z', 59, 'A', 61-193, 'D', 195-325 <WAN>  
A;Note: Trp-156 is at or near the complement-binding site  
R;Connell, G.E.; Parr, D.M.; Hofmann, T.  
Can. J. Biochem. 57, 758-767, 1979  
A;Title: The amino acid sequences of the three heavy chain constant region domains of a  
A;Reference number: A90752; MUID:80001357; PMID:113060  
A;Contents: myeloma protein Zie  
A;Accession: A90752  
A;Molecule type: protein  
A;Residues: 1-24, 'E', 26-57, 'EV', 60-85, 132-171, 'ZZZ', 175, 'B', 177-193, 'D', 195-196, 'Q', 198.  
A;Note: this sequence has since been revised  
R;Hofmann, T.; Parr, D.M.  
Mol. Immunol. 16, 923-925, 1979  
A;Title: A note on the amino acid sequence of residues 381-391 of human immunoglobulin  
A;Reference number: A93132; MUID:80114419; PMID:118920  
A;Contents: Zie  
A;Accession: A93132  
A;Molecule type: protein  
A;Residues: 238-275 <HOF>  
R;Hofmann, T.; Parr, D.M.  
submitted to the Atlas, March 1980  
A;Reference number: A94591  
A;Contents: annotation; Zie, revisions to residues 25, 59, 60, and 264-268  
A;Note: the revised sequence differs from that shown in having 60-Ala and in the amidat  
ned  
R;Milstein, C.; Frangione, B.  
Biochem. J. 121, 217-225, 1971  
A;Title: Disulfide bridges of the heavy chain of human immunoglobulin G2.  
A;Reference number: A90253; MUID:72033500; PMID:4940472  
A;Contents: annotation; myeloma protein Sa, disulfide bonds  
R;Frangione, B.; Milstein, C.; Pink, J.R.L.  
Nature 221, 145-148, 1969  
A;Title: Structural studies of immunoglobulin G.  
A;Reference number: A93157; MUID:69064124; PMID:5782707  
A;Contents: annotation; Sa, disulfide bonds  
C;Genetics:  
A;Gene: GDB:IGHG2  
A;Cross-references: GDB:119338; OMIM:147110  
A;Map position: 14q32.33-14q32.33  
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kai  
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into 1  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
C;Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin  
F;20-85/Domain: immunoglobulin homology <IMI>  
F;133-202/Domain: immunoglobulin homology <IM2>  
F;239-306/Domain: immunoglobulin homology <IM3>  
F;14/Disulfide bonds: interchain (to light chain) #status experimental  
F;27-83, 140-200, 246-304/Disulfide bonds: #status experimental  
F;102, 103, 105, 109/Disulfide bonds: interchain (to heavy chain) #status experimental  
F;176/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 90.7%; Score 1145; DB 1; Length 326;  
Best Local Similarity 91.4%; Pred. No. 2.3e-80;  
Matches 212; Conservative 9; Mismatches 7; Indels 4; Gaps 2;

QY 1 EPKSCDKTHTCPCPAPELLGSPVFLFPKPKDILMISRTPEVTCVVDVSHEDPEVKF 60  
DB 99 ERKCCVE---CPKCPAPP-VAGFSPVFLFPKPKDILMISRTPEVTCVVDVSHEDPEVKF 154  
QY 61 NWYVDGVEVHNATKPREQYNSTYRVSVLTVLVHQLDGLNGKEYCKVSNKALPAPIEKT 120  
DB 155 NWYVDGVEVHNATKPREQYNSTYRVSVLTVLVHQLDGLNGKEYCKVSNKALPAPIEKT 214  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180

Db 215 ISKTGQPREPQVYTLPPSEEMTKQVSTCLVKGFPYSDIAVEESNQPENNYKTP 274  
QY 181 PVLDSGSPFLYKSLTVDKSRWQGNVFCSSVMHEALHNYTKSLSLSPGK 232  
Db 275 PMLDSGSPFLYKSLTVDKSRWQGNVFCSSVMHEALHNYTKSLSLSPGK 326

RESULT 9

G4HU  
Ig gamma-4 chain C region - human  
C:Species: Homo sapiens (man)  
C:Date: 02-Apr-1982 #sequence\_revision 02-Apr-1982 #text\_change 09-Jul-2004  
C:Accession: A90249; A02150  
R:Ellison, J.; Buxbaum, J.; Hood, L.  
DNA 1, 11-18, 1981  
A:Title: Nucleotide sequence of a human immunoglobulin C-gamma4 gene.  
A:Reference number: A90933; MUID:83157104; PMID:6299662  
A:Accession: A90933  
A:Molecule type: DNA  
A:Residues: 1-327 <ELL>  
A:Cross-references: UNIPROT:P01861  
A:Note: the sequence was determined from the germline gene  
R:Pink, J.R.L.; Buttery, S.H.; De Vries, G.M.; Milstein, C.  
Biochem. J. 117, 33-47, 1970  
A:Title: Human immunoglobulin subclasses. Partial amino acid sequence of the constant  
A:Reference number: A90249; MUID:70207560; PMID:4192699  
A:Accession: A90249  
A:Molecule type: protein  
A:Residues: 1-307;81-326 <PIN>  
C:Genetics:  
A:Gene: GDB:IGHG4  
A:Cross-references: GDB:119340; OMIM:147130  
A:Map position: 14q32.33-14q32.33  
A:Introns: 99/1; 111/1; 221/1  
C:Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kappa) chain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into larger complexes: immunoglobulin C region; immunoglobulin homology  
C:Superfamily: immunoglobulin C region; immunoglobulin homology  
C:Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin  
F:20-85/Domain: immunoglobulin homology <IM1>  
F:99-110/Region: hinge  
F:134-203/Domain: immunoglobulin homology <IM2>  
F:240-307/Domain: immunoglobulin homology <IM3>  
F:14/Disulfide bonds: interchain (to light chain) #status experimental  
F:27-83,141-201,247-305/Disulfide bonds: #status predicted  
F:106,109/Disulfide bonds: interchain (to heavy chain) #status experimental  
F:177/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 89.9%; Score 1135; DB 1; Length 327;  
Best Local Similarity 93.7%; Pred. No. 1.3e-79;  
Matches 208; Conservative 8; Mismatches 6; Indels 0; Gaps 0;

QY 11 CPACPAPPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKENWYVDGVH 70  
Db 106 CPSCAPPEFLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSDQEDPEVQNWYVDGVH 165  
QY 71 NAKTKPREOYNGTYRVSVLTVLHODWLNKGYCKVSNKALPAPTEKTIISKAKQPRE 130  
Db 166 NAKTKPREOYNGTYRVSVLTVLHODWLNKGYCKVSNKALPAPTEKTIISKAKQPRE 225  
QY 131 PQVYTLPPSRDELTKQVSTCLVKGFPYSDIAVEESNQPENNYKTPPVLDSDGSPFF 190  
Db 226 PQVYTLPPSQEEMTKQVSTCLVKGFPYSDIAVEESNQPENNYKTPPVLDSDGSPFF 285  
QY 191 LYSKLTVDKSRWQGNVFCSSVMHEALHNYTKSLSLSPGK 232  
Db 286 LYSRLTVDKSRWQGNVFCSSVMHEALHNYTKSLSLSGK 327

RESULT 10

GHRB  
Ig gamma chain C region - rabbit  
C:Species: Oryctolagus cuniculus (domestic rabbit)

C:Date: 24-Apr-1984 #sequence\_revision 15-Nov-1984 #text\_change 09-Jul-2004  
C:Accession: A91749; A90290; A93928; A90245; A94416; A02161  
R:Bernstein, K.E.; Alexander, C.B.; Mage, R.G.  
Immunogenetics 18, 387-397, 1983  
A:Title: Nucleotide sequence of a rabbit IgG heavy chain from the recombinant F-I haplo  
A:Reference number: A91749; MUID:84030930; PMID:6313520  
A:Accession: A91749  
A:Molecule type: mRNA  
A:Residues: 1-323 <BER>  
A:Cross-references: UNIPROT:P01870  
A:Note: this sequence has the d12 allotypic marker, 104-Thr, and the e14 marker, 185-Thr  
R:Pratt, D.M.; Mole, L.E.  
Biochem. J. 151, 337-349, 1975  
A:Title: Sequence studies on the constant region of the Fd sections of rabbit immunoglobulin  
A:Reference number: A90290; MUID:76135469; PMID:1243651  
A:Accession: A90290  
A:Molecule type: protein  
A:Residues: 1-47, 'E', 49-71, 'PV', 72-128 <PRA>  
R:Martens, C.L.; Moore, K.W.; Steinmetz, M.; Hood, L.; Knight, K.L.  
Proc. Natl. Acad. Sci. U.S.A. 79, 6018-6022, 1982  
A:Title: Heavy chain genes of rabbit IgG; isolation of a cDNA encoding gamma heavy chain  
A:Reference number: A93928; MUID:83299917; PMID:6193512  
A:Accession: A93928  
A:Molecule type: mRNA  
A:Residues: 88-103, 'M', 105-143, 'E', 145-184, 'A', 186, 'E', 188-266 <MAR>  
A:Cross-references: GB:M16426; NID:G165111; PID:AAA31289.1; PID:G165112  
A:Note: this sequence has the d11 allotypic marker, 104-Met, and the e15 allotypic marker  
R:Fruchter, R.G.; Jackson, S.A.; Mole, L.E.; Porter, R.R.  
Biochem. J. 116, 249-259, 1970  
A:Title: Sequence studies of the Fd section of the heavy chain of rabbit immunoglobulin  
A:Reference number: A90245; MUID:70110015; PMID:5461106  
A:Accession: A90245  
A:Molecule type: protein  
A:Residues: 132-143, 'E', 145-161 <PRU>  
R:Hill, R.L.; Lebovitz, H.E.; Fellows Jr., R.E.; Delaney, R.  
in Gamma Globulins, Nobel Symp. 3, Killander, J., ed., pp.109-127, Almqvist and Wiksell  
A:Reference number: A94416  
A:Accession: A94416  
A:Molecule type: protein  
A:Residues: 129-131, 155-172, 'D', 174-184, 'A', 186, 'E', 188-200, 'D', 202-217, 'E', 219-232, 'Q'  
A:Note: this has the e15 allotypic marker, 185-Ala  
C:Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kappa) chain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into larger complexes: immunoglobulin C region; immunoglobulin homology  
C:Superfamily: immunoglobulin C region; immunoglobulin homology  
C:Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin  
F:20-82/Domain: immunoglobulin homology <IM1>  
F:130-199/Domain: immunoglobulin homology <IM2>  
F:236-303/Domain: immunoglobulin homology <IM3>  
F:173/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 72.9%; Score 921; DB 1; Length 323;  
Best Local Similarity 67.3%; Pred. No. 3.1e-63;  
Matches 167; Conservative 31; Mismatches 34; Indels 16; Gaps 2;

QY 1 EPKSCDKTH-----TC--PPCPAPPELLGGPSVFLPFPKPKDTLMISRTPEV 44  
Db 76 QPVTCTVAHPATNTKVDKTVAPSTCKPTCPPPELLGGPSVFPFPKPKDTLMISRTPEV 135  
QY 45 TCVVVDVSHEDPEVKENWYVDGVENAKTKPREOYNGTYRVSVLTVLHODWLNKGY 104  
Db 136 TCVVVDVSDQEDPEVQVTYINNEQVTRTPPLPREQQFNSTIRVSTLPITHQDWLRGKEF 195  
QY 105 KCKVSNKALPAPTEKTIISKAKQPREPQVYTLPPSRDELTKQVSTCLVKGFPYSDIAV 164  
Db 196 KCKVSNKALPAPTEKTIISKAKQPREPQVYTLPPSRDELTKQVSTCLVKGFPYSDIAV 255  
QY 165 EWESNQPENNYKTPPVLDSDGSPFFLYSKLTVDKSRWQGNVFCSSVMHEALHNYTK 224  
Db 256 EWEKNGKAEDNYKTTTPAVLDSGSPFLYKSLTVDKSRWQGNVFCSSVMHEALHNYTK 315  
QY 225 SLSLSPGK 232  
Db 316 SLSLSPGK 323

## RESULT 11

I47160  
Ig gamma 2b chain constant region - pig (fragment)  
C:Species: Sus scrofa domestica (domestic pig)  
C>Date: 21-Feb-1997 #sequence\_revision 21-Feb-1997 #text\_change 21-Jan-2000  
C/Accession: I47160  
R;Kacskovics, I.; Sun, J.; Butler, J.E.  
J. Immunol. 153, 3565-3573, 1994  
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a  
A;Reference number: I47158; MUID:95015845; PMID:7930579  
A;Accession: I47160  
A;Status: preliminary; translated from GB/EMBL/DBJ  
A;Molecule type: mRNA  
A;Residues: 1-328 <KAC>  
A;Cross-references: EMBL:U03780; NID:G433125; PIDN:AAA52218.1; PID:G433126  
C;Genetics:  
A;Gene: IgG2b  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
F;133-202/Domain: immunoglobulin homology <IMM>

Query Match 71.8%; Score 906.5; DB 2; Length 328;  
Best Local Similarity 73.2%; Pred. No. 4.1e-62;  
Matches 164; Conservative 29; Mismatches 28; Indels 3; Gaps 2;

QY 11 CPPCPAPELLGSPVFLFPKPKDMLISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH 70

DB 106 CPICPACE-SPGSPVFIFFPKPKDMLISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH 164

QY 71 NAKTKPREQYNSTYRVSVLVTLVHQLDGLNGKEFKCKVNNKLPAPITRIISKAKQPRE 130

DB 165 TAQTRPKKEQFNSTYRVSVLVTLVHQLDGLNGKEFKCKVNNKLPAPITRIISKAKQPRE 224

QY 131 PQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGO--PENNYKTTTPVLDSG 188

DB 225 PQVYTLPPHAEELSRKSVITCLVIGFYPPDIDVEWQNGQPEPEGNVYRTTPQDVGDT 284

QY 189 FFYLSKLTVDKSRWQGNVFSQVMHEALHNHYTKSLSPGK 232

DB 285 YFLYSKFSVDKASWQGGIFQCAVMHEALHNHYTKSLSPGK 328

## RESULT 12

I47159  
Ig gamma 2a chain constant region - pig (fragment)  
C:Species: Sus scrofa domestica (domestic pig)  
C>Date: 21-Feb-1997 #sequence\_revision 21-Feb-1997 #text\_change 21-Jan-2000  
C/Accession: I47159  
R;Kacskovics, I.; Sun, J.; Butler, J.E.  
J. Immunol. 153, 3565-3573, 1994  
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a  
A;Reference number: I47158; MUID:95015845; PMID:7930579  
A;Accession: I47159  
A;Status: preliminary; translated from GB/EMBL/DBJ  
A;Molecule type: mRNA  
A;Residues: 1-328 <KAC>  
A;Cross-references: EMBL:U03779; NID:G433123; PIDN:AAA52217.1; PID:G433124  
C;Genetics:  
A;Gene: IgG2a  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
F;133-202/Domain: immunoglobulin homology <IMM>

Query Match 71.8%; Score 906.5; DB 2; Length 328;  
Best Local Similarity 73.2%; Pred. No. 4.1e-62;  
Matches 164; Conservative 29; Mismatches 28; Indels 3; Gaps 2;

QY 11 CPPCPAPELLGSPVFLFPKPKDMLISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH 70

DB 106 CPICPACE-SPGSPVFIFFPKPKDMLISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH 164

QY 71 NAKTKPREQYNSTYRVSVLVTLVHQLDGLNGKEFKCKVNNKLPAPITRIISKAKQPRE 130

DB 165 TAQTRPKKEQFNSTYRVSVLVTLVHQLDGLNGKEFKCKVNNKLPAPITRIISKAKQPRE 224

DB 165 TAQTRPKKEQFNSTYRVSVLVTLVHQLDGLNGKEFKCKVNNKLPAPITRIISKAKQPRE 224

QY 131 PQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGO--PENNYKTTTPVLDSG 188

DB 225 PQVYTLPPHAEELSRKSVITCLVIGFYPPDIDVEWQNGQPEPEGNVYRTTPQDVGDT 284

QY 189 FFYLSKLTVDKSRWQGNVFSQVMHEALHNHYTKSLSPGK 232

DB 285 YFLYSKFSVDKASWQGGIFQCAVMHEALHNHYTKSLSPGK 328

## RESULT 13

I47162  
Ig gamma 4 chain constant region - pig (fragment)  
C:Species: Sus scrofa domestica (domestic pig)  
C>Date: 21-Feb-1997 #sequence\_revision 21-Feb-1997 #text\_change 21-Jan-2000  
C/Accession: I47162  
R;Kacskovics, I.; Sun, J.; Butler, J.E.  
J. Immunol. 153, 3565-3573, 1994  
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a  
A;Reference number: I47158; MUID:95015845; PMID:7930579  
A;Accession: I47162  
A;Status: preliminary; translated from GB/EMBL/DBJ  
A;Molecule type: mRNA  
A;Residues: 1-277 <KAC>  
A;Cross-references: EMBL:U03782; NID:G433129; PIDN:AAA52220.1; PID:G433130  
C;Genetics:  
A;Gene: IgG4  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
F;82-151/Domain: immunoglobulin homology <IMM>

Query Match 71.5%; Score 903; DB 2; Length 277;  
Best Local Similarity 72.1%; Pred. No. 6.2e-62;  
Matches 165; Conservative 29; Mismatches 31; Indels 4; Gaps 3;

QY 8 THTCPPCP-APELLG-SPSVFLFPKPKDMLISRTPEVTCVVVDVSHEDPEVKFNWYVD 65

DB 49 TTKTKPPCPICPACEGPGPSAFIFPKPKDMLISRTPEVTCVVVDVSHEDPEVKFNWYVD 108

QY 66 GVEVHNATKPREQYNSTYRVSVLVTLVHQLDGLNGKEFKCKVNNKLPAPITRIISKAK 125

DB 109 GVEVHTAQTTRPKKEQFNSTYRVSVLVTLVHQLDGLNGKEFKCKVNNKLPAPITRIISKAK 168

QY 126 GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGO--PENNYKTTTPPV 183

DB 169 GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGO--PENNYKTTTPPV 228

QY 184 DSDGFFLYSKLTVDKSRWQGNVFSQVMHEALHNHYTKSLSPGK 232

DB 229 DVDGTFFLYSKLAVDKASWQGGIFQCAVMHEALHNHYTKSLSPGK 277

## RESULT 14

G2GP  
Ig gamma-2 chain C region - guinea pig  
C:Species: Cavia porcellus (guinea pig)  
C>Date: 07-May-1981 #sequence\_revision 07-May-1981 #text\_change 09-Jul-2004  
C/Accession: A94553; A90352; A90359; A90384; A90385; A02151  
R;Trischmann, T.M.  
submitted to the Atlas, April 1975  
A;Reference number: A94553  
A;Accession: A94553  
A;Molecule type: protein  
A;Residues: 1-3 <TRI>  
A;Cross-references: UNIPROT:P01862  
R;Birstein, B.K.; Hussain, Q.Z.; Cebra, J.J.  
Biochemistry 10, 18-25, 1971  
A;Title: Structure of heavy chain from strain 13 guinea pig immunoglobulin-G(2). III. A  
A;Reference number: A90352; MUID:71058471; PMID:5538606  
A;Accession: A90352  
A;Molecule type: protein  
A;Residues: 4-68 <BIR>  
R;Turner, K.J.; Cebra, J.J.

Biochemistry 10, 9-17, 1971  
A;Title: Structure of heavy chain from strain 13 guinea pig immunoglobulin-G(2) . II. And  
A;Reference number: A90359; MUID:71058486; PMID:5538616  
A;Accession: A90359  
A;Molecule type: protein  
A;Residues: 69-133;312-329 <TR>  
R;Tracy, D.E.; Cebra, J.J.  
Biochemistry 13, 4796-4803, 1974  
A;Title: Primary structure of the C-H2 homology region from guinea pig IgG2 antibodies.  
A;Reference number: A90384; MUID:75036072; PMID:4429665  
A;Accession: A90384  
A;Molecule type: protein  
A;Residues: 134-226 <TRA>  
R;Tischmann, T.M.; Cebra, J.J.  
Biochemistry 13, 4804-4811, 1974  
A;Title: Primary structure of the C-H3 homology region from guinea pig IgG2 antibodies.  
A;Reference number: A90385; MUID:75036073; PMID:4609467  
A;Accession: A90385  
A;Molecule type: protein  
A;Residues: 227-311 <TR2>  
R;Oliveira, B.; Lamm, M.E.  
Biochemistry 10, 26-31, 1971  
A;Title: Interchain disulfide bridges of guinea pig gamma-2- immunoglobulin.  
A;Reference number: A90354; MUID:71058474; PMID:4922544  
A;Contents: annotation; disulfide bonds  
A;Note: Cys-16 is involved in a heavy-light chain bond  
A;Note: Cys-105, Cys-107, and Cys-110 form inter-heavy chain bonds  
C;Comment: This chain was isolated from pooled serum of strain 13 inbred guinea pigs.  
C;Complex: An immunoglobulin heterotrimer subunit consists of two identical light (kappa) chain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into larger complexes.  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
C;Keywords: duplication; glycoprotein; heterotrimer; immunoglobulin  
F;21-81/Domain: immunoglobulin homology <IM1>  
F;135-204/Domain: immunoglobulin homology <IM2>  
F;241-310/Domain: immunoglobulin homology <IM3>  
F;28-79/Disulfide bonds: #status experimental  
F;142-202/Disulfide bonds: #status experimental  
F;178/Binding site: carbohydrate (Asn) (covalent) #status experimental  
F;248-308/Disulfide bonds: #status experimental

Query Match 70.9%; Score 896; DB 1; Length 329;  
Best Local Similarity 70.4%; Pred. No. 2.6e-61;  
Matches 164; Conservative 25; Mismatches 38; Indels 6; Gaps 2;

QY 1 ERKSDKTHPCPCAPPELLGSPVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 101 ZPBPC-----TCPKCPPEENLGSPSVFIFFPKPKDTLMISLTPTVTCVVVDVSDQDEPEVKF 156  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 157 TWFVDNKPVGNAETKPRVEQYNTTFRVESVLPVPIQHQDWLNGKEYKCKVSNKALPAPIEKT 216  
QY 121 ISKAKGQPREPVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEWESNGQP--ENNYKT 178  
DB 217 ISKTKGAPRPDVPVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEWESNGQP--ENNYKT 276  
QY 179 TTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPG 231  
DB 277 TPPIEDADGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPG 329

RESULT 15  
I47158  
Ig gamma 1 chain constant region - pig (fragment)  
C;Species: Sus scrofa domestica (domestic pig)  
C;Date: 21-Feb-1997 #sequence\_revision 21-Feb-1997 #text\_change 21-Jan-2000  
C;Accession: I47158  
R;Kacskovics, I.; Sun, J.; Butler, J.E.  
J. Immunol 153, 3565-3573, 1994  
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a  
A;Reference number: I47158; MUID:95015845; PMID:7930579  
A;Accession: I47158  
A;Status: preliminary; translated from GB/EMBL/DBJ

A;Molecule type: mRNA  
A;Residues: 1-328 <KAC>  
A;Cross-references: EMBL:U03778; NID:G433121; PIDN:AAA52216.1; PID:G433122  
C;Genetics:  
A;Gene: IgG1  
C;Superfamily: immunoglobulin C region; immunoglobulin homology  
F;133-202/Domain: immunoglobulin homology <IMM>  
Query Match 70.1%; Score 885.5; DB 2; Length 328;  
Best Local Similarity 72.4%; Pred. No. 1.7e-60;  
Matches 163; Conservative 27; Mismatches 32; Indels 3; Gaps 2;

QY 10 TCPPCAPPELLGSPVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV 69  
DB 105 TCPICPGCE-VAGPSVFIFPPKPKDTLMISQTPEVTCVVVDVSKHAEEVQFSWYVDGVEV 163  
QY 70 HNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR 129  
DB 164 HTAETPRKEEQNFNSTYRVVSVLPVPIQHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQSR 223  
QY 130 EPOVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEWESNGQ--PNNYKTTTPPVLDSDG 187  
DB 224 EPOVYTLPPPAEELSRSKVTLCVLGFGYPPDIHVEKSNQGPENPTYRTTTPPQDDVDG 283  
QY 188 SFELYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPG 232  
DB 284 TFFLYSKLAVDKARWDHGDGKFCVAVMHEALHNNHYTKSLSPG 328

Search completed: February 10, 2005, 05:43:56  
Job time : 11.567 secs

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OM protein - protein search, using sw model

Run on: February 10, 2005, 05:40:01 ; Search time 33.7503 Seconds  
(without alignments)  
3520.040 Million cell updates/sec

Title: US-10-617-619A-7

Perfect score: 1263

Sequence: 1 EPKSCDKTHTCPAPPELL.....MHEALNHVTKQSLSLSPGK 232

Scoring table: BLOSUM62DX

Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

UniProt\_03:\*

1: uniprot\_sprot:\*

2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Match	Length	DB	ID	Description
1	1263	100.0	330	1	GCI_HUMAN	P01857 homo sapien
2	1263	100.0	465	5	O6GMX6	O6GMX6 homo sapien
3	1263	100.0	466	2	O6IN78	O6IN78 homo sapien
4	1263	100.0	469	2	Q7Z7P5	Q7Z7P5 homo sapien
5	1263	100.0	470	2	O6PJ44	O6PJ44 homo sapien
6	1263	100.0	470	2	Q7Z5W1	Q7Z5W1 homo sapien
7	1263	100.0	472	2	O6N089	O6N089 homo sapien
8	1263	100.0	475	2	O6GMW7	O6GMW7 homo sapien
9	1263	100.0	476	2	O6GMX1	O6GMX1 homo sapien
10	1263	100.0	679	2	Q96PQ8	Q96PQ8 homo sapien
11	1259	99.7	473	2	O6P055	O6P055 homo sapien
12	1259	99.7	475	2	O6MZQ6	O6MZQ6 homo sapien
13	1259	99.7	480	2	O6N094	O6N094 homo sapien
14	1259	99.7	481	2	O6N097	O6N097 homo sapien
15	1259	99.7	482	2	Q7Z351	Q7Z351 homo sapien
16	1257	99.5	348	2	O6PYX1	O6PYX1 homo sapien
17	1257	99.5	473	2	O6MZV7	O6MZV7 homo sapien
18	1257	99.5	478	2	O6P181	O6P181 homo sapien
19	1257	99.5	480	2	O6PFJ1	O6PFJ1 homo sapien
20	1256	99.4	466	2	O6N096	O6N096 homo sapien
21	1252	99.1	475	2	O6N095	O6N095 homo sapien
22	1252	99.1	544	2	O6PJ35	O6PJ35 homo sapien
23	1234	97.7	357	2	Q65ZL2	Q65ZL2 mus sp. fv/
24	1176	93.1	484	2	Q86T72	Q86T72 homo sapien
25	1176	93.1	518	2	O6N030	O6N030 homo sapien
26	1172	92.8	521	2	Q8N4Y9	Q8N4Y9 homo sapien
27	1161	91.9	509	2	Q8NF17	Q8NF17 homo sapien
28	1156	91.5	290	1	GCI_HUMAN	P01859 homo sapien
29	1145	90.7	326	1	GC3_MOUSE	P03987 mus musculus
30	1145	90.7	417	2	O6N093	O6N093 homo sapien
31	1142	90.4	464	2	O6MZU6	O6MZU6 homo sapien

#### RESULT 1

ID	GCI_HUMAN	STANDARD;	PRT;	330 AA.
AC	P01857;			
DT	21-JUL-1986 (Rel. 01, Created)			
DT	21-JUL-1986 (Rel. 01, Last sequence update)			
DE	25-OCT-2004 (Rel. 45, Last annotation update)			
DE	Ig gamma-1 chain C region.			
GN	Name=IGHG1;			
OS	Homo sapiens (Human)			
OC	Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RX	MEDLINE=82274238; PubMed=6287432;			
RA	Ellison J.W., Berson B.J., Hood L.B.;			
RT	"The nucleotide sequence of a human immunoglobulin C gamma gene.";			
RL	Nucleic Acids Res. 10:4071-4079(1982).			
RN	[2]			
RP	SEQUENCE OF 1-135 (MYELOMA PROTEIN EU).			
RX	MEDLINE=71064024; PubMed=5489771;			
RA	Cunningham B.A., Rutishauser U., Gall W.E., Gottlieb P.D.,			
RA	Waxdal M.J., Edelman G.M.;			
RT	"The covalent structure of a human gamma G-immunoglobulin. VII. Amino acid sequence of heavy-chain cyanogen bromide fragments H1-H4.";			
RL	Biochemistry 9:3161-3170(1970).			
RN	[3]			
RP	SEQUENCE OF 136-329 (EU).			
RX	MEDLINE=71064025; PubMed=5530842;			
RA	Rutishauser U., Cunningham B.A., Bennett C., Konigsberg W.H.,			
RA	Edelman G.M.;			
RT	"The covalent structure of a human gamma G-immunoglobulin. 8. Amino acid sequence of heavy-chain cyanogen bromide fragments H5-H7.";			
RL	Biochemistry 9:3171-3181(1970).			
RN	[4]			
RP	SEQUENCE (MYELOMA PROTEIN NIE).			
RX	MEDLINE=77070269; PubMed=826475;			
RA	Ponstingl H., Hilschmann N.;			
RT	"The rule of antibody structure. The primary structure of a monoclonal IgG1 immunoglobulin (myeloma protein Nie). III. The chymotryptic peptides of the H-chain, alignment of the tryptic peptides and discussion of the complete structure.";			
RL	Hoppe-Seyler's Z. Physiol. Chem. 357:1571-1604(1976).			
RN	[5]			
RP	SEQUENCE (MYELOMA PROTEIN KOL), AND DISULFIDE BONDS.			
RX	MEDLINE=83289131; PubMed=6884994;			
RA	Schmidt W.E., Jung H.-D., Palm W., Hilschmann N.;			
RT	"Three-dimensional structure determination of antibodies. Primary structure of crystallized monoclonal immunoglobulin IgG1 KOL, I.";			
RL	Hoppe-Seyler's Z. Physiol. Chem. 364:713-747(1983).			
RN	[6]			
RP	DISULFIDE BONDS.			
RX	MEDLINE=71064027; PubMed=4923144;			

32	1140	90.3	465	2	O6PC64	O6PC64 homo sapien
33	1135	89.9	327	1	GC4_HUMAN	P01861 homo sapien
34	1135	89.9	473	2	Q8TC63	Q8TC63 homo sapien
35	1131	89.5	493	2	O68CN4	O68CN4 homo sapien
36	1126	89.2	476	2	O6MZX7	O6mzx7 homo sapien
37	921	72.9	323	1	GC_RABIT	P01870 oryctolagus
38	915.5	72.5	327	2	Q95W34	Q95m34 equus caball
39	896	70.9	329	1	GC2_CAVPO	P01862 cavia porce
40	845.5	66.9	329	1	GC3_MOUSE	P22436 mus musculus
41	845.5	66.9	470	2	Q7TMK1	Q7tmk1 mus musculus
42	842	66.7	333	1	GC3_RAT	P20761 rattus norv
43	834.5	66.1	303	2	O6KAM2	O6kam2 mus musculus
44	834.5	66.1	398	1	GC3M_MOUSE	P03987 mus musculus
45	833.5	66.0	463	2	Q991C4	Q991c4 mus musculus

#### ALIGNMENTS

RA Gall W.E., Edelman G.M.;  
 RT "The covalent structure of a human gamma G-immunoglobulin. X.  
 RT Intrachain disulfide bonds."; Biochemistry 9:3188-3196(1970).  
 RN [7]  
 RP DISULFIDE BONDS.  
 RX MEDLINE=77070267; PubMed=1002129;  
 RA Dreker L., Schwarz J., Reichel W., Hilschmann N.;  
 RT "Rule of antibody structure. The primary structure of a monoclonal  
 RT IgG1 immunoglobulin (myeloma protein Nie), I: purification and  
 RT characterization of the protein, the L- and H-chains, the cyanogen  
 RT bromide cleavage products, and the disulfide bridges."; Hoppe-Seyler's Z. Physiol. Chem. 357:1515-1540(1976).  
 RL [8]  
 RN X-RAY CRYSTALLOGRAPHY (2.9 ANGSTROMS).  
 RP MEDLINE=81208100; PubMed=7236608;  
 RX Beisenhofer J.;  
 RA "Crystallographic refinement and atomic models of a human Fc fragment  
 RT and its complex with fragment B of protein A from Staphylococcus  
 RT aureus at 2.9- and 2.8-A resolution."; Biochemistry 20:2361-2370(1981).  
 RL  
 CC -1- MISCELLANEOUS: Nis has the G1M(17) allotypic marker, 97-K, and the  
 CC G1M(1) markers, 239-B and 241-L. KOL and EU sequences have the  
 CC G1M(3) marker and the G1M (non-1) markers.  
 CC -1- MISCELLANEOUS: Nie also differs in the amidation states of 35,  
 CC 116, 198, 269 and 272.  
 CC -1- MISCELLANEOUS: EU also differs in the amidation states of residues  
 CC 155, 166, 177, 195, 198, 269, and 272 and in the order of residues  
 CC 268-272.  
 CC -1- MISCELLANEOUS: KOL also differs in the amidation states of  
 CC residues 198, 267 and 272.  
 CC -----  
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration  
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 CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).  
 CC -----  
 DR EMBL; J00228; AAC82527.1; ALT\_INIT.  
 DR PIR; A93433; GHU.  
 DR PDB; 1AJ7; X-ray; H=1-103.  
 DR PDB; 1DSB; X-ray; B/H=1-101.  
 DR PDB; 1DS1; X-ray; H=1-101.  
 DR PDB; 1DS6; X-ray; H=1-101.  
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 DR PDB; 1E4X; X-ray; A/B=106-329.  
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 DR PDB; 2RCS; X-ray; H=1-103.  
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 DR MIM; 147100; -.  
 DR GO; GO:0005624; C:membrane fraction; NAS.  
 DR GO; GO:0003823; F:antigen binding; TAS.  
 DR GO; GO:0006955; P:immune response; NAS.  
 DR InterPro; IPR007110; Ig-like.  
 DR InterPro; IPR003006; Ig\_MHC.  
 DR Pfam; PF0047; Ig; 3.  
 DR PROSITE; PS00835; IG\_LIKE; 3.  
 DR PROSITE; PS00290; IG\_MHC; 2.  
 KW 3D-structure; Direct protein sequencing; Glycoprotein;  
 KW Immunoglobulin C region; Immunoglobulin domain.  
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 FT DOMAIN 1 98 CH1.  
 FT DOMAIN 99 110 Hinge.

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FT	DISULFID	109	109	Interchain (with heavy chain).
FT	DISULFID	112	112	Interchain (with heavy chain).
FT	DISULFID	144	204	
FT	DISULFID	250	308	
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FT	STRAND	26	33	
FT	STRAND	38	38	
FT	STRAND	41	41	
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FT	TURN	48	49	
FT	STRAND	50	52	
FT	STRAND	57	58	
FT	TURN	59	61	
FT	STRAND	62	71	
FT	HELIX	73	75	
FT	TURN	76	78	
FT	STRAND	82	87	
FT	TURN	88	91	
FT	STRAND	92	97	
FT	TURN	102	103	
FT	STRAND	122	126	
FT	HELIX	130	134	
FT	TURN	136	137	
FT	STRAND	141	149	
FT	STRAND	157	162	
FT	TURN	163	164	
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FT	TURN	179	180	
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FT	TURN	198	199	
FT	STRAND	202	207	
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FT	STRAND	227	227	
FT	STRAND	230	234	
FT	HELIX	238	242	
FT	STRAND	245	256	
FT	TURN	261	266	
FT	TURN	267	268	
FT	STRAND	269	270	
FT	STRAND	274	276	
FT	STRAND	280	281	
FT	TURN	283	284	
FT	STRAND	287	296	
FT	HELIX	297	301	
FT	TURN	302	303	
FT	STRAND	306	311	
FT	TURN	313	314	
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 Db 99 EPKSCDKTHTCPCPAPELLGGPSVFLPDKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158



DR PROSITE; PS00290; IG\_MHC; UNKNOWN 2.  
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Best Local Similarity 100.0%; Pred. No. 1.8e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
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DB 235 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVVDVSHEDPEVKF 294  
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DB 295 NWYVDGVEVHNAKTPREEQNSTYRVVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 354  
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DB 355 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 414  
QY 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSPGK 232  
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DT 01-OCT-2003 (TrEMBLrel. 25, Last sequence update)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)  
DE IGH1 protein.  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_TaxID=9606;  
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RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,  
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,  
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,  
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,  
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,  
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RA Brownstein M.J., Udwin T.B., Toshlyuk S., Carninci P., Prange C.,  
RA Raha S.S., McEwan P.J., McKernan K.J., Abramson R.D., Mullaly S.J.,  
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,  
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,  
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,  
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,  
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,  
RA Krzywinski M.I., Skalska U., Smallos D.E., Schnerch A., Schein J.E.,  
RA Jones S.J., Marra M.A.;  
RT "Generation and initial analysis of more than 15,000 full-length human  
and mouse cDNA sequences";  
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).  
[2]  
RN SEQUENCE FROM N.A.  
RC TISSUE=Spleen;  
RA Strausberg R.;  
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DR HSSP; P01857; 1H2H.  
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DR InterPro; IPR003597; IG cl.  
DR InterPro; IPR003006; IG MHC.  
DR InterPro; IPR003596; IG v.  
DR Pfam; PF07654; Cl-set; 1.  
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SQ SEQUENCE 466 AA; 50853 MW; 53BE0BCEDB81076E CRC64;  
Query Match 100.0%; Score 1263; DB 2; Length 466;  
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Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
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DB 235 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVVDVSHEDPEVKF 294  
QY 61 NWYVDGVEVHNAKTPREEQNSTYRVVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120  
DB 295 NWYVDGVEVHNAKTPREEQNSTYRVVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 354  
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DB 355 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 414  
QY 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSPGK 232  
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ID Q7Z7P5 AC Q7Z7P5  
DT 01-OCT-2003 (TrEMBLrel. 25, Created)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last sequence update)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)  
DE IGH1 protein.  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
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RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,  
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,  
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,  
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,  
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,  
RA Scapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,  
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RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,  
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RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,  
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,  
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RA Krzywinski M.I., Skalska U., Smallos D.E., Schnerch A., Schein J.E.,  
RA Jones S.J., Marra M.A.;  
RT "Generation and initial analysis of more than 15,000 full-length human  
and mouse cDNA sequences";  
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).  
[2]  
RN SEQUENCE FROM N.A.  
RC TISSUE=Spleen;  
RA Strausberg R.;  
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DR EMBL; BC051328; AAH51328.1; --  
DR HSSP; P01857; 1H2H.  
DR InterPro; IPR007110; IG-like.  
DR InterPro; IPR003597; IG cl.  
DR InterPro; IPR003006; IG MHC.  
DR InterPro; IPR003596; IG v.  
DR Pfam; PF07654; Cl-set; 1.  
DR SMART; SM00406; IGV; 1.

DR PROSITE; PS00290; IG\_MHC; UNKNOWN 2.  
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Query Match 100.0%; Score 1263; DB 2; Length 469;  
Best Local Similarity 100.0%; Pred. No. 1.8e-91;  
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QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
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DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)  
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)  
DE Hypothetical protein.  
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OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
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RP SEQUENCE FROM N.A.  
RC TISSUE=Primary B-Cells;  
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;  
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,  
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RA Krzywinski M.I., Skalska U., Smallos D.E., Schnerch A., Schein J.E.,  
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RT "Generation and initial analysis of more than 15,000 full-length human  
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RN SEQUENCE FROM N.A.  
RC TISSUE=Primary B-Cells;  
RA Strausberg R.;  
RL Submitted (DEC-2001) to the EMBL/GenBank/DBJ databases.  
DR EMBL; BC018747; AAH18747.1; --  
DR HSSP; P01861; 1ADO.  
DR InterPro; IPR003599; IG.  
DR InterPro; IPR007110; IG-like.  
DR InterPro; IPR003597; IG cl.  
DR InterPro; IPR003006; IG MHC.  
DR InterPro; IPR003596; IG v.

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DR Pfam; PF07654; Cl-set; 3.
DR SMART; SM00409; IG; 2.
DR SMART; SM00407; IG1; 3.
DR SMART; SM00406; IGv; 1.
DR PROSITE; PS00835; IG LIKE; 4.
DR PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW Hypothetical protein.
SQ SEQUENCE 470 AA; 51715 MW; 7849556A11F7D799 CRC64;

Query Match 100.0%; Score 1263; DB 2; Length 470;
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DB 359 ISKAKGPRPQVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPNNTKTP 418

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AC Q725W1
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DT 01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Hypothetical protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
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SEQUENCE FROM N.A.
TISSUE=Spleen;
RC MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
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RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smalius D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
[2]
SEQUENCE FROM N.A.
TISSUE=Spleen;
RC Strausberg R.;
RA Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC053984; AAH53984.1; -;
DR HSSP; P01857; 1H2H.

QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 239 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298

QY 61 NWTVDGVEVHNATKPREEQNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
DB 299 NWTVDGVEVHNATKPREEQNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 358

QY 121 ISKAKGPRPQVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPNNTKTP 180
DB 359 ISKAKGPRPQVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPNNTKTP 418

QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKLSLSLSPGK 232
DB 419 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKLSLSLSPGK 470

RESULT 7
Q6N089 PRELIMINARY; PRT; 472 AA.
AC Q6N089
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Hypothetical protein DKF2p686P15220.
GN Name=DKF2p686P15220;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
[1]
SEQUENCE FROM N.A.
TISSUE=Human rectum tumor;
RC The German Human cDNA Consortium;
RA Wambutt R., Heubner D., Mewes H.W., Weil B., Amid C., Osanger A.,
RA Fobo G., Han M., Wiemann S.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; BX640627; CAB45781.1; -;
DR HSSP; P01861; IADQ.
DR InterPro; IPR003599; IG.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003597; IG-cl.
DR InterPro; IPR003006; IG_MHC.
DR InterPro; IPR003596; IG_v.
DR Pfam; PF07654; Cl-set; 3.
DR SMART; SM00409; IG; 2.
DR SMART; SM00407; IG1; 3.
DR SMART; SM00406; IGv; 1.
DR PROSITE; PS00835; IG LIKE; 4.
DR PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW Hypothetical protein.
SQ SEQUENCE 472 AA; 51724 MW; 26CB340D0046D279 CRC64;

Query Match 100.0%; Score 1263; DB 2; Length 472;
Best Local Similarity 100.0%; Pred. No. 1.8e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 239 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298

QY 61 NWTVDGVEVHNATKPREEQNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
DB 299 NWTVDGVEVHNATKPREEQNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 358

QY 121 ISKAKGPRPQVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPNNTKTP 180
DB 359 ISKAKGPRPQVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPNNTKTP 418

QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKLSLSLSPGK 232
DB 419 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKLSLSLSPGK 470
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Db 241 EPKCDKTHTCPPAPPELLGSPSVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 300
QY 61 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 301 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 360
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTP 180
Db 361 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTP 420
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
Db 421 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 472

RESULT 8
Q6GMW7 PRELIMINARY; PRT; 475 AA.
AC Q6GMW7
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Hypothetical protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Spleen;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M.J., Udell T.B., Toshuyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Soares M.B., Bonaldo M.F., Casavant T.L., Mullahy S.J.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
[2]
RP SEQUENCE FROM N.A.
RC TISSUE=Spleen;
RA Strausberg R.;
RL Submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.
DR ENBL; BC073782; AAH73782.1; -.
DR InterPro; IPR003599; Ig.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003597; Ig cl.
DR InterPro; IPR003006; Ig_VHC.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF07654; Cl-set; 3.
DR SMART; SM00407; Ig; 4.
DR SMART; SM00409; Ig; 2.
DR SMART; SM00407; IGC1; 3.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG-LIKE; 4.
DR PROSITE; PS00290; IG_VHC; UNKNOWN_2.
KW Hypothetical protein.
SQ SEQUENCE 475 AA; 51987 MW; 2A1FE55D736860F8 CRC64;

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Query Match 100.0%; Score 1263; DB 2; Length 475;
Best Local Similarity 100.0%; Pred. No. 1.8e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKCDKTHTCPPAPPELLGSPSVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 244 EPKCDKTHTCPPAPPELLGSPSVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 303
QY 61 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 304 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTP 180
Db 364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTP 423
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
Db 424 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 475

RESULT 9
Q6GMX1 PRELIMINARY; PRT; 476 AA.
AC Q6GMX1
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Hypothetical protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Spleen;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M.J., Udell T.B., Toshuyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Soares M.B., Bonaldo M.F., Casavant T.L., Mullahy S.J.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Gunaratne P.H.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
[2]
RP SEQUENCE FROM N.A.
RC TISSUE=Spleen;
RA Strausberg R.;
RL Submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.
DR ENBL; BC073773; AAH73773.1; -.
DR InterPro; IPR003599; Ig.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003597; Ig cl.
DR InterPro; IPR003006; Ig_VHC.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF07654; Cl-set; 3.
DR SMART; SM00407; Ig; 4.
DR SMART; SM00409; Ig; 2.
DR SMART; SM00407; IGC1; 3.
DR SMART; SM00406; IGV; 1.

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DR PROSITE; PS50835; IG LIKE; 4.  
DR PROSITE; PS00290; IG\_MHC; UNKNOWN\_2.  
KW Hypothetical protein.  
SQ SEQUENCE 476 AA; 52286 MW; 622AABA5C62DDE9D CRC64;  
  
Query Match 100.0%; Score 1263; DB 2; Length 476;  
Best Local Similarity 100.0%; Pred. No. 1.8e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHCTPCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 245 EPKSCDKTHCTPCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 304  
  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKSKYCKVSNKALPAPIEKT 120  
DB 305 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKSKYCKVSNKALPAPIEKT 364  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 180  
DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 424  
  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSMVHEALHNHYTQKSLSLSPGK 232  
DB 425 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSMVHEALHNHYTQKSLSLSPGK 476  
  
RESULT 10  
Q96PQ8 ID Q96P08 PRELIMINARY; PRT; 679 AA.  
AC Q96P08  
DT 01-DEC-2001 (TrEMBLrel. 19, Created)  
DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)  
DE Factor VII active site mutant immunocjugate.  
OS Homo sapiens (human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RA Hu Z.; Garen A.;  
RL Submitted (FEB-2003) to the EMBL/GenBank/DBJ databases.  
DR EMBL; AF272774; AAK58686.2; -.  
DR HSSP; P08709; 1KLI.  
DR GO; GO:0005576; C:extracellular; IEA.  
DR GO; GO:0005509; F:calcium ion binding; IEA.  
DR GO; GO:0008233; F:peptidase activity; IEA.  
DR GO; GO:0004295; F:trypsin activity; IEA.  
DR GO; GO:0006508; P:proteolysis and peptidolysis; IEA.  
DR InterPro; IPR000152; Asx hydroxyl\_S.  
DR InterPro; IPR000742; EGF\_2.  
DR InterPro; IPR001881; EGF\_Ca.  
DR InterPro; IPR006209; EGF\_Like.  
DR InterPro; IPR007110; Ig-like.  
DR InterPro; IPR003597; Ig cl.  
DR InterPro; IPR003306; Ig MHC.  
DR InterPro; IPR001254; Peptidase S1.  
DR InterPro; IPR009003; Pept\_Ser\_Cys.  
DR Pfam; PF07654; Cl-set; 2.  
DR Pfam; PF00008; EGF; 1.  
DR Pfam; PF00594; Gla; 1.  
DR Pfam; PF00089; Trypsin; 1.  
DR SMART; SM00179; EGF\_CA; 1.  
DR SMART; SM00069; GLA; 1.  
DR SMART; SM00407; IGG1; 1.

DR SMART; SM00020; Tryp\_SPC; 1.  
DR PROSITE; PS0010; ASX HYDROXYL; UNKNOWN\_1.  
DR PROSITE; PS0022; EGF\_1; UNKNOWN\_1.  
DR PROSITE; PS01186; EGF\_2; 1.  
DR PROSITE; PS0026; EGF\_3; 1.  
DR PROSITE; PS01187; EGF\_CA; 1.  
DR PROSITE; PS00011; GLA\_1; 1.  
DR PROSITE; PS00835; IG LIKE; 2.  
DR PROSITE; PS00290; IG\_MHC; UNKNOWN\_1.  
DR PROSITE; PS0240; TRYPSIN\_DOM; 1.  
DR PROSITE; PS00134; TRYPSIN\_HIS; UNKNOWN\_1.  
DR PROSITE; PS00135; TRYPSIN\_SER; 1.  
KW EGF-like domain; Hydrolase; Protease; Serine protease.  
SQ SEQUENCE 679 AA; 75552 MW; 0B0023AE70A067A1 CRC64;  
  
Query Match 100.0%; Score 1263; DB 2; Length 679;  
Best Local Similarity 100.0%; Pred. No. 2.8e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHCTPCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 448 EPKSCDKTHCTPCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 507  
  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKSKYCKVSNKALPAPIEKT 120  
DB 508 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKSKYCKVSNKALPAPIEKT 567  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 180  
DB 568 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 627  
  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSMVHEALHNHYTQKSLSLSPGK 232  
DB 628 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSMVHEALHNHYTQKSLSLSPGK 679  
  
RESULT 11  
Q96P05 ID Q96P05 PRELIMINARY; PRT; 473 AA.  
AC Q96P05;  
DT 05-JUL-2004 (TrEMBLrel. 27, Created)  
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)  
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)  
DE Hypothetical protein.  
OS Homo sapiens (human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RA Strausberg R.L.; Feingold E.A.; Grouse L.H.; Derge J.G.  
RA Klausner R.D.; Collins F.S.; Wagner L.; Shenmen C.M.; Schuler G.D.;  
RA Altschul S.F.; Zeeberg B.; Buetow K.H.; Schaefer C.F.; Bhat N.K.;  
RA Hopkins R.F.; Jordan H.; Moore T.; Max S.I.; Wang J.; Hsieh F.;  
RA Diatchenko L.; Marusina K.; Farmer A.A.; Rubin G.M.; Hong L.;  
RA Stapleton M.; Soares M.B.; Bonaldo M.F.; Casavant T.L.; Scheetz T.E.;  
RA Brownstein M.J.; Ustin T.B.; Toshiyuki S.; Carninci P.; Prange C.;  
RA Rana S.S.; Loquellano N.A.; Peters G.J.; Abramson R.D.; Mullany S.J.;  
RA Bosak S.A.; McEwan P.J.; McKernan K.J.; Malek J.A.; Gunaratne P.H.;  
RA Richards S.; Worley K.C.; Hale S.; Garcia A.M.; Gay L.J.; Hulyk S.W.;  
RA Villalón D.K.; Muzny D.M.; Sodergren E.J.; Lu X.; Gibbs R.A.;  
RA Fahey J.; Helton E.; Kettelman M.; Madan A.; Rodrigues S.; Sanchez A.;  
RA Whiting M.; Madan A.; Young A.C.; Shevchenko Y.; Bouffard G.G.;  
RA Blakeley R.W.; Touchman J.W.; Green E.D.; Dickson M.C.;  
RA Rodriguez A.C.; Grimwood J.; Schmutz J.; Myers R.M.; Butterfield Y.S.;  
RA Krzywinski M.I.; Skaleka U.; Smallos D.E.; Schnerch A.; Schein J.E.;  
RA Jones S.J.; Marra M.A.;  
RT "Generation and initial analysis of more than 15,000 full-length human  
RT and mouse cDNA sequences.";  
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  
RN [2]

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RP SEQUENCE FROM N.A.
RC TISSUE=Peripheral Nervous System;
RA Strausberg R.;
RL Submitted (JAN-2004) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC065920; AAH65920.1; -.
DR HSSP; P01861; IADQ.
DR InterPro; IPR003599; Ig.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003597; Ig_c1.
DR InterPro; IPR003006; Ig_c1.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF07654; Cl-set; 3.
DR SMART; SM00409; IG; 2.
DR SMART; SM00407; IGC1; 3.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG_LIKE; 4.
DR PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW Hypothetical protein.
SQ SEQUENCE 473 AA; 51344 MW; 9816D56A77129B57 CRC64;

Query Match          99.7%; Score 1259; DB 2; Length 473;
Best Local Similarity 99.6%; Pred. No. 3.8e-91;
Matches 231; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 242 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 301
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 302 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 361
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 421
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVNHEALHNHYTQKSLSLSPGK 232
DB 422 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVNHEALHNHYTQKSLSLSPGK 473

RESULT 12
Q6MZQ6 PRELIMINARY; PRT; 475 AA.
AC Q6MZQ6;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DE Hypothetical protein DKFZp686G1190.
GN Name=DKFZp686G1190;
OS Homo sapiens (Human)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Human esophagus tumor;
RG The German Human cDNA Consortium;
RA Lauber J., Bahr A., Mewes H.W., Weil B., Amid C., Osanger A., Fobo G., Han M., Wiemann S.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; BX640947; CAB45972.1; -.
DR HSSP; P01861; IADQ.
DR InterPro; IPR003599; Ig.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003597; Ig_c1.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF07654; Cl-set; 3.
DR SMART; SM00409; IG; 2.
DR SMART; SM00407; IGC1; 3.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG_LIKE; 4.
DR PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW Hypothetical protein.
SQ SEQUENCE 480 AA; 52612 MW; 225247F3D35AEC18 CRC64;

Query Match          99.7%; Score 1259; DB 2; Length 480;
Best Local Similarity 99.6%; Pred. No. 3.9e-91;
Matches 231; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 249 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 309 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368
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DR PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW Hypothetical protein.
SQ SEQUENCE 475 AA; 52043 MW; B7EAE255A26F4B8E CRC64;

Query Match          99.7%; Score 1259; DB 2; Length 475;
Best Local Similarity 99.6%; Pred. No. 3.8e-91;
Matches 231; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 244 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 304 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 423
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVNHEALHNHYTQKSLSLSPGK 232
DB 424 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVNHEALHNHYTQKSLSLSPGK 475

RESULT 13
Q6N094 PRELIMINARY; PRT; 480 AA.
AC Q6N094;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Hypothetical protein DKFZp686O01196.
GN Name=DKFZp686O01196;
OS Homo sapiens (Human)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Human esophagus tumor;
RG The German Human cDNA Consortium;
RA Wambutt R., Heubner D., Mewes H.W., Weil B., Amid C., Osanger A., Fobo G., Han M., Wiemann S.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; BX640622; CAB45776.1; -.
DR HSSP; P01861; IADQ.
DR InterPro; IPR003599; Ig.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003597; Ig_c1.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF07654; Cl-set; 3.
DR SMART; SM00409; IG; 2.
DR SMART; SM00407; IGC1; 3.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG_LIKE; 4.
DR PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW Hypothetical protein.
SQ SEQUENCE 480 AA; 52612 MW; 225247F3D35AEC18 CRC64;

Query Match          99.7%; Score 1259; DB 2; Length 480;
Best Local Similarity 99.6%; Pred. No. 3.9e-91;
Matches 231; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 249 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 309 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368
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QY 121 ISKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 369 ISKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 428  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 232  
DB 429 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 480

## RESULT 14

Q6N097 PRELIMINARY; PRT; 481 AA.  
AC Q6N097;  
DT 05-JUL-2004 (TrEMBLrel. 27, Created)  
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)  
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)  
DE Hypothetical protein DKFp686H20196.  
GN Name=DKFp686H20196;  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE=Human esophagus tumor;  
RA Wambutt R., Heubner D., Mewes H.W., Weil B., Amid C., Osanger A.,  
RA Fobo G., Han M., Wiemann S.;  
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.  
DR EMBL; BX40619; CAB45773.1; -;  
DR HSSP; P01861; IADQ.  
DR InterPro; IPR003599; Ig.  
DR InterPro; IPR007110; Ig-like.  
DR InterPro; IPR003597; Ig cl.  
DR InterPro; IPR003006; Ig\_MHC.  
DR InterPro; IPR003596; Ig\_v.  
DR Pfam; PF07654; Cl-set; 3.  
DR SMART; SM00409; IG1; 3.  
DR SMART; SM00406; IG1; 1.  
DR SMART; SM00406; IG1; 1.  
DR PROSITE; PS50835; IG\_LIKE; 4.  
DR PROSITE; PS00290; IG\_MHC; UNKNOWN\_2.  
KW Hypothetical protein.  
SQ SEQUENCE 481 AA; 52759 MW; 47220D9B64BDF98B CRC64;

Query Match 99.7%; Score 1259; DB 2; Length 481;  
Best Local Similarity 99.6%; Pred. No. 3.9e-91;  
Matches 231; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 250 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 309  
QY 61 NWTVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 310 NWTVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 369  
QY 121 ISKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 370 ISKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 429  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 232  
DB 430 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 481

## RESULT 15

Q7Z351 PRELIMINARY; PRT; 482 AA.  
AC Q7Z351;  
DT 01-OCT-2003 (TrEMBLrel. 25, Created)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last sequence update)  
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)

DE Hypothetical protein DKFp686N02209.  
GN Name=DKFp686N02209;  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE=Human rectum tumor;  
RA Bloeker H., Boecker M., Mewes H.W., Weil B., Amid C., Osanger A.,  
RA Fobo G., Han M., Wiemann S.;  
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.  
DR EMBL; BX538118; CAD98026.1; -;  
DR HSSP; P01857; 1HZH.  
DR InterPro; IPR007110; Ig-like.  
DR InterPro; IPR003597; Ig cl.  
DR InterPro; IPR003006; Ig\_MHC.  
DR InterPro; IPR003596; Ig\_v.  
DR Pfam; PF07654; Cl-set; 3.  
DR SMART; SM00406; IG1; 1.  
DR PROSITE; PS50835; IG\_LIKE; 4.  
DR PROSITE; PS00290; IG\_MHC; UNKNOWN\_2.  
KW Hypothetical protein.  
SQ SEQUENCE 482 AA; 52852 MW; EDA75F1901D1A034 CRC64;

Query Match 99.7%; Score 1259; DB 2; Length 482;  
Best Local Similarity 99.6%; Pred. No. 3.9e-91;  
Matches 231; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 251 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 310  
QY 61 NWTVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 311 NWTVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 370  
QY 121 ISKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 371 ISKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 430  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 232  
DB 431 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 482

Search completed: February 10, 2005, 05:46:09  
Job time : 35.7503 secs

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GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: February 10, 2005, 06:40:32 ; Search time 72 Seconds  
(without alignments)  
1246.228 Million cell updates/sec

Title: US-10-617-619A-7

Perfect score: 1263

Sequence: 1 EPKSCDKTHTCPPCPAPELL.....MHEALHNYTKSLSLSPGK 232

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2105692 segs, 386760381 residues

Total number of hits satisfying chosen parameters: 334

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 100%

Maximum Match 100%

Listing first 500 summaries

- Database : A\_Geneseq\_16Dec04:\*
- 1: Geneseqp1980s:\*
  - 2: Geneseqp1990s:\*
  - 3: Geneseqp2000s:\*
  - 4: Geneseqp2001s:\*
  - 5: Geneseqp2002s:\*
  - 6: Geneseqp2003as:\*
  - 7: Geneseqp2003bs:\*
  - 8: Geneseqp2004s:\*

pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1263	100.0	232	2	Aaw26232 Human IGG
2	1263	100.0	232	3	Aab28690 Human IGG
3	1263	100.0	232	4	Aab80897 Human IGG
4	1263	100.0	232	4	Aay72915 Human par
5	1263	100.0	232	5	Aae15347 Human imm
6	1263	100.0	232	5	Aae26272 Human IGG
7	1263	100.0	232	7	Adj65991 Herpes vl
8	1263	100.0	232	8	Adj57512 Human IGG
9	1263	100.0	232	8	Adr48992 Human IGG
10	1263	100.0	233	5	Abb09463 Human IGG
11	1263	100.0	235	6	Abj38647 pCFC pro
12	1263	100.0	235	6	Ada89055 Plasmid p
13	1263	100.0	235	7	Add25647 Binding d
14	1263	100.0	235	7	Adg74307 Fibroblas
15	1263	100.0	247	5	Aae26274 Human bet
16	1263	100.0	251	5	Abb81490 Human imm
17	1263	100.0	251	6	Aae35214 Human wil
18	1263	100.0	259	2	Aay24154 Protein f
19	1263	100.0	267	5	Aae26273 Human tpa
20	1263	100.0	269	8	Adj52120 CH1 delet
21	1263	100.0	287	4	Aab47590 Fusion pr
22	1263	100.0	329	2	Aar91806 Human imm
23	1263	100.0	329	8	Adp56389 Human PRO
24	1263	100.0	329	8	Ads82579 Human IGG
25	1263	100.0	330	4	Aab04071 Zcytor 10

26	1263	100.0	330	5	AAM47856 Human Ig-
27	1263	100.0	330	5	Aae21960 Human dea
28	1263	100.0	330	5	Abb81641 Human IGG
29	1263	100.0	330	5	Abb05736 Human imm
30	1263	100.0	330	5	Abp71856 Human IGG
31	1263	100.0	330	6	Aae32915 Human imm
32	1263	100.0	330	6	Aae32627 Human imm
33	1263	100.0	330	6	Abr82103 Human DR6
34	1263	100.0	330	6	Aao31102 Human A2-
35	1263	100.0	330	6	Abr55836 Anti-Ang-
36	1263	100.0	330	6	Aao30893 Human imm
37	1263	100.0	330	7	Adf11389 Anti-OPGL
38	1263	100.0	330	7	Ades7351 Human IGG
39	1263	100.0	330	7	Adf83605 Cytokine
40	1263	100.0	330	7	Adf75001 Human Ig
41	1263	100.0	330	8	Adm41537 Anti-inte
42	1263	100.0	330	8	Adm68911 Human IGG
43	1263	100.0	330	8	Adn36570 Chemokine
44	1263	100.0	330	8	Adn97485 Artificia
45	1263	100.0	330	8	Adr43460 Heavy cha
46	1263	100.0	330	8	Adr31605 Human IGG
47	1263	100.0	330	8	Ades7909 Anti-IFN-
48	1263	100.0	330	8	Adn33230 IGL1-CH h
49	1263	100.0	330	8	Adn94906 Anti-IFN-
50	1263	100.0	331	3	Aay91106 Human TR-
51	1263	100.0	331	6	Abu05197 Human exp
52	1263	100.0	332	8	Adl35095 Human IGG
53	1263	100.0	333	8	Adj95912 Human IGG
54	1263	100.0	333	8	Adl22761 Human ant
55	1263	100.0	351	2	Aar43685 Human kap
56	1263	100.0	356	8	Adj95976 Immunoglo
57	1263	100.0	358	6	Abp98040 Amino aci
58	1263	100.0	367	1	Adf73150 RBLP-Fc f
59	1263	100.0	371	1	Aap91918 Sequence
60	1263	100.0	371	1	Aap93558 Linkered
61	1263	100.0	376	2	Aaw60037 Antigenic
62	1263	100.0	377	6	Abj37105 Concatame
63	1263	100.0	377	8	Adq79914 Human CTL
64	1263	100.0	379	2	Aaw49073 Recombina
65	1263	100.0	379	2	Aaw83962 Recombina
66	1263	100.0	388	5	Abb07681 MOG-Fc fu
67	1263	100.0	388	6	Adal4289 Mutated M
- 68	1263	100.0	388	6	Adal4265 Human imm
69	1263	100.0	396	2	Aaw18574 Aggrecona
70	1263	100.0	396	2	Aaw18575 Aggrecona
71	1263	100.0	396	8	Adf57557 Mouse ymk
72	1263	100.0	400	3	Aay15123 Porcine C
73	1263	100.0	404	5	Aau97108 Mouse MK6
74	1263	100.0	423	3	Aab28693 Fc-huAGP-
75	1263	100.0	424	2	Aaw14765 Human sol
76	1263	100.0	424	2	Aaw14764 Human sol
77	1263	100.0	426	3	Aab28695 Fc-muAGP-
78	1263	100.0	435	2	Aar36530 Sequence
79	1263	100.0	437	2	Aaw10552 Alpha-1-a
80	1263	100.0	437	6	Abj37104 Concatame
81	1263	100.0	437	8	Adg79912 Human CD2
82	1263	100.0	439	8	Ado47876 Alpha-Her
83	1263	100.0	440	7	Adj66000 Herpes vi
84	1263	100.0	440	8	Adp03589 Infection
85	1263	100.0	441	3	Aab28692 Fc-huAGP-
86	1263	100.0	442	2	Aaw10550 IGL1 poly
87	1263	100.0	442	6	Abr39465 Humanised
88	1263	100.0	442	6	Abr39474 Humanised
89	1263	100.0	442	6	Abu08311 Humanised
90	1263	100.0	442	6	Abu08320 Humanised
91	1263	100.0	442	6	Abr39793 Humanised
92	1263	100.0	442	6	Abb80113 Deglycosy
93	1263	100.0	442	6	Abb80109 Heavy cha
94	1263	100.0	442	7	Ades94066 Humanised
95	1263	100.0	442	7	Ades94075 Humanised
96	1263	100.0	442	7	Adh54473 Human imm
97	1263	100.0	442	8	Adn61714 Humanised
98	1263	100.0	444	6	Aae35327 Humanised

99	1263	100.0	444	6	AAE34876	Aae34876 BIWA4/8 a	172	1263	100.0	465	7	ADL23150	Adl23150 Mouse/hum
100	1263	100.0	444	8	ADL15443	Adl15443 Humanised	173	1263	100.0	467	2	AAE22759	Aar22759 Reshaped
101	1263	100.0	444	8	ADO0851	Ado0851 Humanised	174	1263	100.0	467	2	AAE22758	Aar22758 Reshaped
102	1263	100.0	445	2	AAE24153	Aay24153 Bovine I0	175	1263	100.0	467	7	ADM05608	Adm05608 Human pro
103	1263	100.0	445	6	AAO31101	Aao31101 Human A2-	176	1263	100.0	467	8	ADM41567	Adm41567 Anti-infe
104	1263	100.0	445	7	ADF11421	Adf11421 2B11 anti	177	1263	100.0	468	5	AAE27928	Aae27928 Human CSE
105	1263	100.0	445	7	AAW05829	Aaw05829 Humanised	178	1263	100.0	468	6	ABP58237	Abp58237 Antibody
106	1263	100.0	446	2	AAW05829	Aaw05829 Humanised	179	1263	100.0	468	6	ABP58237	Abp58237 Humanised
107	1263	100.0	446	7	ADF11425	Adf11425 2D8 anti-	180	1263	100.0	468	8	ADR46819	Adr46819 Human ant
108	1263	100.0	446	7	ADF11437	Adf11437 9H7 anti-	181	1263	100.0	468	8	ADR46819	Adr46819 Human ant
109	1263	100.0	446	7	ADF11433	Adf11433 16E1 anti	182	1263	100.0	469	8	ADM41555	Adm41555 Anti-infe
110	1263	100.0	446	7	ADF11417	Adf11417 22B3 anti	183	1263	100.0	469	8	ADM41561	Adm41561 Anti-infe
111	1263	100.0	446	8	ADR19328	Adr19328 Chimeric	184	1263	100.0	470	3	AAU77289	Aau77289 Reshaped
112	1263	100.0	447	2	AAE31669	Aay31669 Human IGG	185	1263	100.0	470	3	AAU77289	Aau77289 Protein #
113	1263	100.0	447	7	ADL35333	Adl35333 Human ant	186	1263	100.0	470	5	AAE27923	Aae27923 Human C2B
114	1263	100.0	447	8	ADQ31274	Adq31274 Humanised	187	1263	100.0	470	6	ABE28232	Abp28232 Antibody
115	1263	100.0	447	8	ADQ31271	Adq31271 Murine I1	188	1263	100.0	470	7	ADP65576	Adp65576 Human pro
116	1263	100.0	447	8	ADQ31276	Adq31276 Humanised	189	1263	100.0	470	8	ADM72021	Adm72021 Chimeric
117	1263	100.0	447	8	ADQ66378	Adq66378 Novel hum	190	1263	100.0	470	8	ADM72021	Adm72021 Chimeric
118	1263	100.0	447	8	ADR19327	Adr19327 Chimeric	191	1263	100.0	471	3	AAE45030	Aay45030 HUMAN OCR
119	1263	100.0	447	8	ADR19328	Adr19328 Anti-IFN-	192	1263	100.0	471	7	ADM05609	Adm05609 Human pro
120	1263	100.0	447	8	ADS87924	Ads87924 Anti-IFN-	193	1263	100.0	471	7	ADM05600	Adm05600 Human pro
121	1263	100.0	447	8	ADS87926	Ads87926 Anti-IFN-	194	1263	100.0	471	8	ADM72029	Adm72029 Chimeric
122	1263	100.0	447	8	ADS87939	Ads87939 Anti-IFN-	195	1263	100.0	471	8	ADM72029	Adm72029 Chimeric
123	1263	100.0	447	8	ADS94936	Ads94936 Anti-IFN-	196	1263	100.0	472	6	ABP58289	Abp58289 Humanised
124	1263	100.0	447	8	ADS94923	Ads94923 Anti-IFN-	197	1263	100.0	472	7	ADM05388	Adm05388 Human pro
125	1263	100.0	447	8	ADS94921	Ads94921 Anti-IFN-	198	1263	100.0	472	8	ADG66377	Adg66377 Novel hum
126	1263	100.0	447	8	ADS94925	Ads94925 Anti-IFN-	199	1263	100.0	472	8	ADS88783	Ads88783 Sequence
127	1263	100.0	448	3	AAE28634	Aab28634 FC-muAGP-	200	1263	100.0	473	4	AAE64475	Aeg64475 Human typ
128	1263	100.0	448	5	AAE49203	Aam49203 Humanised	201	1263	100.0	473	4	AAE64471	Aag64471 Human typ
129	1263	100.0	448	8	ADP71908	Adp71908 Hu3G8VH-1	202	1263	100.0	473	4	AAE64473	Aag64473 Human typ
130	1263	100.0	448	8	ADP84969	Adp84969 Chimeric	203	1263	100.0	473	7	ADM05599	Adm05599 Human pro
131	1263	100.0	449	2	AAE43339	Aar43339 Completel	204	1263	100.0	473	8	ADM97513	Adm97513 CD1d-IGG-
132	1263	100.0	449	2	AAE49816	Aaw49816 Amino aci	205	1263	100.0	474	7	ADM05597	Adm05597 Human pro
133	1263	100.0	449	6	ABP58273	Abp58273 Humanised	206	1263	100.0	474	2	AAE20057	Aar20057 Heavy cha
134	1263	100.0	449	6	ABP35159	Adi35159 Humanised	207	1263	100.0	475	2	AAE93553	Aar93553 Monoclonal
135	1263	100.0	450	6	ABG74713	Abg74713 Murine hu	208	1263	100.0	475	2	AAW11641	Aaw11641 Human ant
136	1263	100.0	450	7	ABR83153	Abp83153 Hu007 ant	209	1263	100.0	475	2	AAW11639	Aaw11639 Human ant
137	1263	100.0	450	8	ADL18704	Adl18704 Protein s	210	1263	100.0	475	4	AAE63640	Aag63640 Amino aci
138	1263	100.0	450	8	ADL18706	Adl18706 Protein s	211	1263	100.0	475	7	ADM47075	Adm47075 Mouse ant
139	1263	100.0	450	8	ADL18710	Adl18710 Protein s	212	1263	100.0	475	8	ADL23053	Adl23053 Mouse/hum
140	1263	100.0	450	8	ADL18702	Adl18702 Protein s	213	1263	100.0	475	8	ADL23056	Adl23056 Humanised
141	1263	100.0	451	8	ADL18708	Adl18708 Protein s	214	1263	100.0	475	8	ADL23056	Adl23056 Humanised
142	1263	100.0	451	8	ADL12715	Aae12715 Human rec	215	1263	100.0	475	8	ADS88794	Ads88794 A mouse/h
143	1263	100.0	451	5	ABU58807	Aau58807 B7-relate	216	1263	100.0	476	8	ADS88805	Ads88805 Humanised
144	1263	100.0	451	6	ABU58807	Aau58807 Mucin 1 (	217	1263	100.0	476	2	AAE31023	Aar31023 Antibody
145	1263	100.0	451	8	ADL92472	Adl92472 Antibody	218	1263	100.0	476	2	AAW01818	Aaw01818 Primatise
146	1263	100.0	451	8	ADL92469	Adl92469 Antibody	219	1263	100.0	476	2	AAW01822	Aaw01822 Primatise
147	1263	100.0	451	8	ADP88494	Adp88494 Humanised	220	1263	100.0	476	2	AAW63761	Aaw63761 Macaque p
148	1263	100.0	452	2	AAE30201	Aay30201 Heavy cha	221	1263	100.0	476	2	AAW63765	Aaw63765 Macaque p
149	1263	100.0	452	4	AAE97591	Aay97591 Flt1 rece	222	1263	100.0	476	5	AAU11539	Aau11539 Protein s
150	1263	100.0	452	5	ABP52444	Abp52444 Mutation	223	1263	100.0	476	5	AAU11539	Aau11539 Protein s
151	1263	100.0	453	6	ABP58287	Abp58287 Humanised	224	1263	100.0	476	6	AAE37360	Aae37360 Monkey 7C
152	1263	100.0	453	6	ABP56295	Abp56295 4A5-3.1.1	225	1263	100.0	476	6	ABR61564	Abp61564 Human WAB
153	1263	100.0	459	2	AAE42066	Aar42066 Human ant	226	1263	100.0	476	7	ADM05603	Adm05603 Human pro
154	1263	100.0	459	8	ADR86700	Adr86700 Ephrin B2	227	1263	100.0	477	7	ADM05603	Adm05603 Human pro
155	1263	100.0	459	8	ADR82647	Adr82647 Human B2E	228	1263	100.0	477	7	ADM05604	Adm05604 Human pro
156	1263	100.0	460	3	AAE69890	Aay69890 Human NR8	229	1263	100.0	477	7	ADM05604	Adm05604 Human pro
157	1263	100.0	461	2	AAE42162	Aar42162 Anti-HIV-	230	1263	100.0	477	8	ADR10018	Adr10018 Human pro
158	1263	100.0	461	2	AAU07745	Aau07745 Humanised	231	1263	100.0	478	2	AAW63763	Aaw63763 Macaque p
159	1263	100.0	461	6	ABR39844	Abp39844 Hu266 N56	232	1263	100.0	478	5	AAU11644	Aau11644 Protein s
160	1263	100.0	461	6	ABR39847	Abp39847 Hu266 N56	233	1263	100.0	478	6	AAE37362	Aae37362 Monkey 7B
161	1263	100.0	461	6	ABR39843	Abp39843 Hu266 N56	234	1263	100.0	478	8	ADQ67023	Adq67023 Novel hum
162	1263	100.0	461	6	ABR39848	Abp39848 Hu266 N56	235	1263	100.0	480	2	AAW90206	Aaw90206 hb7.1Fc s
163	1263	100.0	461	6	ABJ39025	Abj39025 Fusion pr	236	1263	100.0	480	5	AAU81008	Aau81008 BSLI-Ig f
164	1263	100.0	462	4	AAE377592	Aay377592 Flt1 rece	237	1263	100.0	480	6	AAO16239	Aao16239 B7-relate
165	1263	100.0	462	5	ABP52445	Abp52445 Mutation	238	1263	100.0	480	6	AAO16238	Aao16238 B7-relate
166	1263	100.0	462	6	ABJ39027	Abj39027 Fusion pr	239	1263	100.0	480	6	ABU07263	Abu07263 Human exp
167	1263	100.0	462	8	ADM97598	Adm97598 Mouse mon	240	1263	100.0	481	2	AAR24442	Aar24442 Sequence
168	1263	100.0	463	8	ADM72025	Adm72025 Chimeric	241	1263	100.0	489	5	AAO19052	Aao19052 Cell adhe
169	1263	100.0	465	4	AAE372228	Aay372228 Humanised	242	1263	100.0	492	7	ADD25783	Add25783 Binding d
170	1263	100.0	465	7	ADL23152	Adl23152 Mouse/hum	243	1263	100.0	497	3	AAE97172	Aay97172 Human FGF
171	1263	100.0	465	7	ADL23135	Adl23135 Mouse/hum	244	1263	100.0	499	5	ABG31025	Abg31025 Synthetic

245	1263	100.0	499	7	ADD25587	Adp25587 Binding d	318	1263	100.0	771	8	ADR82646	Adr82646 Human B4E
246	1263	100.0	499	7	ADD25454	Adp25454 Binding d	319	1263	100.0	787	3	AAB11693	Aab11693 Human sec
247	1263	100.0	499	7	ADDM42729	ADDM42729 2H7scFv-I	320	1263	100.0	859	2	Aaw70796	Aaw70796 Human gp1
248	1263	100.0	500	7	ADDM25679	Adm25679 Binding d	321	1263	100.0	859	3	Aay92184	Aay92184 Human gp1
249	1263	100.0	502	8	ADM97493	Adm97493 CD1d-IgG	322	1263	100.0	859	3	ABW02164	Abw02164 Human gp1
250	1263	100.0	504	7	ADD25787	Adp25787 Binding d	323	1263	100.0	951	2	Aaw70798	Aaw70798 Human gp1
251	1263	100.0	504	7	ADY97171	Ady97171 Human FGF	324	1263	100.0	951	2	Aay92186	Aay92186 Human gp1
252	1263	100.0	527	5	AAM47467	Aam47467 Human IL-	325	1263	100.0	951	7	ABW02166	Abw02166 Human gp1
253	1263	100.0	534	2	AAR26531	Aar26531 Sequence	326	1263	100.0	961	3	Aay92187	Aay92187 Integrin
254	1263	100.0	541	5	AAR29077	Aar29077 Human IL-	327	1263	100.0	963	2	Aaw70540	Aaw70540 Integrin
255	1263	100.0	543	7	ADD25784	Adp25784 Binding d	328	1263	100.0	972	7	ADG87101	Adg87101 Glucoamyl
256	1263	100.0	547	4	ABR85279	AbR85279 Human IL-	329	1263	100.0	975	7	ADG87102	Adg87102 Glucoamyl
257	1263	100.0	547	5	ABG87210	Abg87210 Interleuk	330	1263	100.0	1218	2	Aaw70539	Aaw70539 Integrin
258	1263	100.0	547	5	AAE23362	Aae23362 Human IL-	331	1263	100.0	1218	6	ABU04027	Abu04027 Human exp
259	1263	100.0	547	8	ADJ83334	Adj83334 Human IL-	332	1263	100.0	1232	8	ADe45189	AdE45189 Human CD1
260	1263	100.0	557	4	AAY97590	Aay97590 FIt1 rece	333	1263	100.0	1367	2	Aaw70542	Aaw70542 Integrin
261	1263	100.0	557	5	ABP52443	Abp52443 Mutation	334	1263	100.0	1367	6	ABU03615	Abu03615 Human exp
262	1263	100.0	558	5	AAE29076	Aae29076 Human IL-							
263	1263	100.0	567	4	AAY97597	Aay97597 FIt1 rece							
264	1263	100.0	567	4	AAY97593	Aay97593 FIt1 rece							
265	1263	100.0	567	5	ABP52442	Abp52442 FIt1(1-3)							
266	1263	100.0	567	5	ABP52446	Abp52446 Mutation							
267	1263	100.0	567	5	AAE13733	Aae13733 Human Zal							
268	1263	100.0	571	4	ABR85278	AbR85278 Human IL-							
269	1263	100.0	571	4	AAU04065	Aau04065 Human IL-							
270	1263	100.0	571	5	ABG67209	Abg67209 Interleuk							
271	1263	100.0	571	5	AAE23359	Aae23359 Human IL-							
272	1263	100.0	571	8	ADJ83333	Adj83333 Human IL-							
273	1263	100.0	581	4	ABR81972	AbR81972 Ganglios							
274	1263	100.0	581	8	ADP03590	Adp03590 Infection							
275	1263	100.0	582	4	AAE1987	Aae1987 Ganglios							
276	1263	100.0	582	4	AAE1991	Aae1991 Ganglios							
277	1263	100.0	583	4	AAE1991	Aae1991 Ganglios							
278	1263	100.0	585	5	AAE18130	Aae18130 Human IL-							
279	1263	100.0	585	5	AAE18130	Aae18130 Human IL-							
280	1263	100.0	585	8	AAE18130	Aae18130 Human IL-							
281	1263	100.0	592	2	AAW70797	Aaw70797 Human int							
282	1263	100.0	592	3	AAE23185	Aae23185 Human IL-							
283	1263	100.0	592	7	ABW02165	Abw02165 Human IL-							
284	1263	100.0	595	2	AAE66003	Aae66003 Anti-5T4							
285	1263	100.0	608	6	ABJ37102	Abj37102 Concatame							
286	1263	100.0	608	8	ADQ79908	Adq79908 Human tum							
287	1263	100.0	613	8	ADP46827	Adp46827 Human bet							
288	1263	100.0	622	3	AAE97170	Aae97170 Human FGF							
289	1263	100.0	631	1	AAE93009	Aae93009 Genetic c							
290	1263	100.0	631	3	AAE19508	Aae19508 CD4-IgG1							
291	1263	100.0	631	3	AAE151079	Aae151079 Human fus							
292	1263	100.0	631	3	AAE151079	Aae151079 Human fus							
293	1263	100.0	641	8	ADJ57513	Adj57513 Human FVI							
294	1263	100.0	649	8	ADM97531	Adm97531 CD1d-IgG							
295	1263	100.0	652	2	AAW48650	Aaw48650 Heavy cha							
296	1263	100.0	658	3	AAE96782	Aae96782 Ephrin-B2							
297	1263	100.0	659	6	ADJ37103	Adj37103 Concatame							
298	1263	100.0	659	8	ADQ79910	Adq79910 Human tum							
299	1263	100.0	679	8	ADJ57516	Adj57516 Human FVI							
300	1263	100.0	683	3	AAE96781	Aae96781 Ephrin-B1							
301	1263	100.0	685	3	AAE96777	Aae96777 Ang-1-FD-							
302	1263	100.0	686	3	AAE96778	Aae96778 Ang-2-FD-							
303	1263	100.0	689	3	AAE96779	Aae96779 Ang-1-FD-							
304	1263	100.0	689	3	AAE96780	Aae96780 Ang-2-FD-							
305	1263	100.0	690	3	AAE92195	Aae92195 Human IL-							
306	1263	100.0	698	5	AAU81012	Aau81012 B7-relate							
307	1263	100.0	698	6	AAU16237	Aau16237 B7-relate							
308	1263	100.0	701	8	ADJ57511	Adj57511 Human FVI							
309	1263	100.0	713	8	ADN97491	Adn97491 Artificia							
310	1263	100.0	715	8	ADN97489	Adn97489 Artificia							
311	1263	100.0	729	1	AAE93008	Aae93008 Genetic c							
312	1263	100.0	729	3	AAE93008	Aae93008 Genetic c							
313	1263	100.0	729	3	AAE93008	Aae93008 Genetic c							
314	1263	100.0	731	4	AAE52156	Aae52156 Humanised							
315	1263	100.0	741	4	AAE52159	Aae52159 Humanised							
316	1263	100.0	754	3	AAE11691	Aae11691 Human sec							
317	1263	100.0	771	8	ADR86699	Adr86699 Ephrin B4							

## ALIGNMENTS

## RESULT 1

AAW26232  
ID AAW26232 standard; protein; 232 AA.

XX  
AC

XX  
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Human IgG1 hinge/Fc region.  
Fusion protein; hydrophilic spacer; recombinant; expression system;  
carboxypeptidase; IgG1; immunoglobulin; hinge region; Fc.

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Recombinant protein expression system for fusion protein production -  
useful for high quantity production of authentic recombinant proteins.

Example 3; Page 133-134; 194pp; English.

A novel recombinant vector has been developed which comprises a  
nucleotide sequence encoding a fusion protein. The fusion protein  
comprises three domains joined together in order, from N-terminus to C-  
terminus, of a first domain comprising a protein of interest, a second  
domain comprising a hydrophilic spacer and an affinity domain, each  
domain comprising amino acid residues. The present sequence represents  
the hinge/Fc region of human IgG1, used in example 3 of the present  
invention. The recombinant vector is used for the production of authentic  
recombinant proteins of interest. The method of the invention is useful  
for the expression of fusion proteins capable of isolation by affinity  
chromatography in pro- or eukaryotic cells. This method allows for the  
efficient cleavage and generation of authentic proteins of interest that  
do not contain extraneous (i.e. non-naturally occurring) amino acids

Sequence 232 AA;

Query Match 100.0%; Score 1263; DB 2; Length 232;  
Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 1 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTFLHODWLNKKEYCKVSNKALPAPIEKT 120  
DB 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTFLHODWLNKKEYCKVSNKALPAPIEKT 120

QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180

QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232

RESULT 2  
AAB28690  
ID AAB28690 standard; protein; 232 AA.  
XX  
AC AAB28690;  
XX  
DT 14-FEB-2001 (first entry)  
XX  
DE Human IgGgamma1 hinge, CH2 and CH3 regions.  
XX  
KW Human; AGP-1; type II transmembrane protein; cytostatic; antiviral;  
KW antiinflammatory; hepatotropic; antiarteriosclerotic; anti-HIV; HIV;  
KW human immunodeficiency virus; apoptosis; proliferative disorder; cancer;  
KW hepatitis; acquired immunodeficiency syndrome; AIDS; autoimmune disorder;  
KW transplant rejection; cardiovascular disease; arteriosclerosis;  
KW IgGgamma1.  
XX  
OS Homo sapiens.  
XX  
PN WO200063253-A1.  
XX  
PD 26-OCT-2000.  
XX  
PF 24-MAR-2000; 2000WO-US008004.  
XX  
PR 16-APR-1999; 99US-00293245.  
XX  
PA (AMGE-) AMGEN INC.  
XX  
PI Hsu H, Meng S;  
XX  
PS WPI; 2000-665240/64.  
XX  
PT Fusion protein of AGP-1 protein and an Fc region, used to treat  
PT proliferative disorders, immune disorders, and virally-induced disorders.  
XX  
PS Claim 2; Fig 1; 93pp; English.  
XX  
CC The present sequence was used in the production of AGP-1 fusion proteins.  
CC AGP-1 is a type II transmembrane protein. The fusion proteins comprise an  
CC Fc immunoglobulin region fused to the N-terminal portion of the AGP-1  
CC protein. The fusion proteins can be used to induce apoptosis in a tissue,  
CC and to treat proliferative disorders, immune disorders, or virally-  
CC induced disorders. The proliferative disorders include cancers, such as  
CC breast, prostate, lung or colon cancer. The viral infections include  
CC hepatitis, and acquired immunodeficiency syndrome (AIDS), and the immune  
CC disorders may be autoimmune disorders or transplant rejection.  
CC Cardiovascular diseases such as arteriosclerosis may also be treated. The  
CC AGP-1 containing fusion proteins have increased biological activity  
CC compared to the soluble AGP-1 proteins used in prior art therapies  
XX  
SQ Sequence 232 AA;

Query Match 100.0%; Score 1263; DB 3; Length 232;  
Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 1 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTFLHODWLNKKEYCKVSNKALPAPIEKT 120  
DB 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTFLHODWLNKKEYCKVSNKALPAPIEKT 120

QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180

QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232

RESULT 3  
AAB80897  
ID AAB80897 standard; protein; 232 AA.  
XX  
AC AAB80897;  
XX  
DT 31-MAY-2001 (first entry)  
XX  
DE Human IgGgamma1 hinge, CH2 and CH3 regions.  
XX  
KW Human; IgGgamma1; anticancer; Antimetastatic; Osteogenic;  
KW lytic bone disease; multiple myeloma; immunoglobulin;  
KW osteosclerotic bone metastasis; OPG; osteoprotegrin;  
KW osteoclast formation inhibition; bone resorption inhibition.  
XX  
OS Homo sapiens.  
XX  
PN WO200117543-A2.  
XX  
PD 15-MAR-2001.  
XX  
PF 18-AUG-2000; 2000WO-US022806.  
XX  
PR 03-SEP-1999; 99US-00389545.  
XX  
PA (AMGE-) AMGEN INC.  
XX  
PI Dunstan CR;  
XX  
PS WPI; 2001-265936/27.  
XX  
PT Preventing or treating lytic bone diseases, particularly associated with  
PT cancer or metastasis, by administering an osteoprotegrin polypeptide.  
XX  
PS Disclosure; Fig 1; 87pp; English.  
XX  
CC The present invention relates to a method for the prevention or treatment  
CC of lytic bone disease or multiple myeloma. Also the method can be used  
CC for preventing metastasis of cancer to bone or osteosclerotic bone  
CC metastasis. The method comprises administering an OPG (osteoprotegrin)  
CC polypeptide or OPG fusion protein. The OPG proteins (see AAB80898-  
CC AAB80905) can inhibit formation of osteoclasts (and thus bone resorption)  
CC by blocking differentiation from monocytes/macrophage precursors. The  
CC present sequence is the hinge, CH2 and CH3 regions of human IgGgamma1.  
CC This sequence can be used to generate fusion proteins of OPG and  
CC immunoglobulin, for use in the present invention. The generated fusion  
CC proteins can exhibit increased circulating half-lives and slower  
CC clearance times, thereby providing a more sustained activity  
XX  
SQ Sequence 232 AA;

Query Match 100.0%; Score 1263; DB 4; Length 232;  
 Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDDEVKF 60  
 DB 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDDEVKF 60

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180

QY 181 PVLDSGSEFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 232  
 DB 181 PVLDSGSEFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 232

RESULT 4  
 AAY72915  
 ID AAY72915 standard; protein; 232 AA.  
 XX  
 AC AAY72915;  
 XX  
 DT 13-JUN-2001 (first entry)  
 XX  
 DE Human partial IgG1 protein comprising hinge, CH2 and CH3 regions.  
 XX  
 KW Human; fusion protein; osteoprotegerin; OPG; Fc protein; osteopathic;  
 KW therapy; bone loss; osteoporosis; Paget's disease; osteomyelitis;  
 KW hypercalcaemia; osteopenia; osteonecrosis; rheumatoid arthritis;  
 KW osteolytic metastasis; prosthetic loosening; immunoglobulin G; IgG1;  
 KW periodontal;  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200118203-A1.  
 XX  
 PD 15-MAR-2001.  
 XX  
 PF 18-AUG-2000; 2000WO-US022797.  
 XX  
 PR 03-SEP-1999; 99US-00389782.  
 XX  
 PA (AMGE-) AMGEN INC.  
 XX  
 PI Dunstan CR, Wooden SK, Mann MB;  
 XX  
 DR WPI; 2001-244572/25.  
 XX  
 PT Osteoprotegerin-Fc protein fusions useful for treating bone loss caused  
 PT by e.g. osteoporosis, Paget's disease and osteomyelitis.  
 XX  
 PS Claim 3; Fig 1; 119pp; English.  
 XX  
 CC The patent discloses fusion protein comprising human osteoprotegerin  
 CC (OPG) protein fused by linker to human IgG1 Fc portion. OPG negatively  
 CC regulates formation of osteoclasts in vitro and in vivo. It blocks the  
 CC differentiation of osteoclasts from monocyte or macrophage precursors and  
 CC the reabsorption of bone. The OPG-Fc fusion protein is administered for  
 CC the treatment of bone loss resulting from osteoporosis, Paget's disease,  
 CC osteomyelitis, hypercalcaemia, osteopenia associated with surgery or  
 CC steroid administration, osteonecrosis, bone loss due to rheumatoid  
 CC arthritis, periodontal bone loss, osteolytic metastasis and/or prosthetic  
 CC loosening. The present sequence is partial human immunoglobulin G (Ig G)  
 CC 1 protein comprising the hinge and heavy chain constant regions CH2 and  
 CC CH3  
 XX  
 SQ Sequence 232 AA;

Query Match 100.0%; Score 1263; DB 4; Length 232;  
 Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDDEVKF 60  
 DB 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDDEVKF 60

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180

QY 181 PVLDSGSEFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 232  
 DB 181 PVLDSGSEFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 232

RESULT 5  
 AAE15347  
 ID AAE15347 standard; protein; 232 AA.  
 XX  
 AC AAE15347;  
 XX  
 DT 09-APR-2002 (first entry)  
 XX  
 DE Human immunoglobulin G (IgG) gamma 1 constant heavy chain hinge region.  
 XX  
 KW Human; erythropoietin; Epo; haematocrit; anaemia; kidney function; IgG;  
 KW cancer; myelosuppressive therapy; anti-viral drug; immunoglobulin G.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200181405-A2.  
 XX  
 PD 01-NOV-2001.  
 XX  
 PF 19-APR-2001; 2001WO-US012836.  
 XX  
 PR 21-APR-2000; 2000US-00559001.  
 XX  
 PA (AMGE-) AMGEN INC.  
 XX  
 PI Egrie JC, Elliott SG, Browne JK, Sitney KC;  
 XX  
 DR WPI; 2002-034433/04.  
 XX  
 CC Increasing and maintaining hematocrit in mammal suffering from anemia,  
 CC comprising administering hyperglycosylated analog of erythropoietin less  
 CC frequently and at lower molar amount of recombinant human erythropoietin.  
 XX  
 PS Example 1; Fig 10; 95pp; English.  
 XX  
 CC The invention relates to a method for increasing and maintaining  
 CC haematocrit in a mammal. The method comprises administering a  
 CC hyperglycosylated analogue of erythropoietin (Epo) in a pharmaceutical  
 CC composition, less frequently than an equivalent molar amount of and at a  
 CC lower molar amount than recombinant human Epo (rHuEpo) to obtain a  
 CC comparable target haematocrit. Epo is a glycoprotein hormone necessary  
 CC for the maturation of erythroid progenitor cells into erythrocytes. Human  
 CC Epo analogue is useful for raising and maintaining haematocrit to a  
 CC comparable target haematocrit in a mammal suffering from anaemia  
 CC associated with a decline or loss of kidney function, myelosuppressive  
 CC therapy comprising chemotherapeutic or anti-viral drugs or associated  
 CC with excessive blood loss during surgical procedures, and in cancer  
 CC condition. The present sequence is human immunoglobulin G (IgG) gamma 1  
 CC constant heavy chain (CH2, CH3) hinge region used to construct Epo  
 CC hyperglycosylated analogue fusion protein  
 XX  
 SQ Sequence 232 AA;

Query Match 100.0%; Score 1263; DB 5; Length 232;  
 Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

QY 61 NWYVDGVEVHNATKPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 61 NWYVDGVEVHNATKPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180

QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232

RESULT 6  
 AAE26272  
 ID AAE26272 standard; protein; 232 AA.  
 AC AAE26272;  
 DT 14-NOV-2002 (first entry)  
 DE Human IgG1 heavy chain.  
 KW Human; amyloidogenic protein; Alzheimer's disease; Huntington's disease;  
 KW spongiform encephalopathy; familial amyloid cardiomyopathy; amyloidosis;  
 KW Gersmann-Strausler-Scheinker syndrome; spongiform encephalopathy; GSS;  
 KW Creutzfeldt-Jacob disease; insulinoma; diabetes; body myocytis; myeloma;  
 KW CU.  
 OS Homo sapiens.  
 PN WO200242462-A2.  
 XX 30-MAY-2002.  
 XX 27-NOV-2001; 2001WO-US044581.  
 XX 27-NOV-2000; 2000US-0253302P.  
 XX 29-NOV-2000; 2000US-0250198P.  
 XX 20-DEC-2000; 2000US-0257186P.  
 XX (PRAE-) PRAECIS PHARM INC.  
 XX Geffer ML, Israel DI, Joyal JL, Gosselin M;  
 XX WPI; 2002-636427/68.  
 XX Novel therapeutic agent useful for treating an amyloidogenic disorder,  
 XX e.g. Alzheimer's disease, comprises an immunoglobulin heavy chain  
 XX constant region linked to a peptide capable of binding amyloidogenic  
 XX protein.  
 XX Example 8; Page 76; 79pp; English.  
 XX The invention relates to a compound comprising an immunoglobulin (Ig)  
 XX heavy chain constant region or its fragment that retains the ability to  
 XX bind an Fc receptor linked by a linker group or a direct bond to a  
 XX peptide capable of binding an amyloidogenic protein. The invention is  
 XX useful for clearing an amyloidogenic protein such as beta-amyloid,  
 XX transthyretin (TTR), prion protein (PrP), islet amyloid polypeptide  
 XX (IAPP), atrial natriuretic factor (ANF), kappa light chain, lambda light  
 XX chain, amyloid A, procalcitonin, cystatin C, beta2-microglobulin, ApoA-I,  
 XX gelsolin, calcitonin, fibrinogen, Huntington, alpha-synuclein and  
 XX lysozyme from a subject and for treating an amyloidogenic disorder such

as Alzheimer's disease and spongiform encephalopathy. Disorders treatable  
 CC include those caused or characterised by deposits of TTR (eg. familial  
 CC amyloid cardiomyopathy), PrP (eg. spongiform encephalopathies, including  
 CC scrapie in sheep, bovine spongiform encephalopathy in cows and  
 CC Creutzfeldt-Jacob disease (CJ) and Gersmann-Strausler-Scheinker  
 CC syndrome (GSS) in humans), IAPP (eg. insulinoma, adult onset diabetes),  
 CC ANF (eg. isolated atrial amyloid), kappa or lambda light chain (eg.  
 CC idiopathic amyloidosis, myeloma), amyloid A (eg. amyloidosis), Apo A-I  
 CC (eg. hereditary non-neuropathic systemic amyloidosis), Gelsolin (eg.  
 CC familial amyloidosis of Finnish type), Fibrinogen (eg. hereditary renal  
 CC amyloidosis), lysozyme (eg. hereditary systemic amyloidosis). Other  
 CC examples of amyloidogenic disorders include Huntington's disease and  
 CC inclusion body myocytis. The present sequence is human IgG1 heavy chain,  
 CC used in the exemplification of the invention  
 XX Sequence 232 AA;

Query Match 100.0%; Score 1263; DB 5; Length 232;  
 Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

QY 61 NWYVDGVEVHNATKPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 61 NWYVDGVEVHNATKPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180

QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232

RESULT 7  
 ADJ65991  
 ID ADJ65991 standard; protein; 232 AA.  
 AC ADJ65991;  
 DT 06-MAY-2004 (first entry)  
 DE Herpes virus entry mediator-related protein #2.  
 KW therapeutic agent; endotoxin induced disease; fusion protein;  
 KW Herpes virus entry mediator; HVEM; immunoglobulin Fc domain;  
 KW endotoxin shock; human.  
 OS Homo sapiens.  
 PN JP2003128576-A.  
 XX 08-MAY-2003.  
 XX 25-OCT-2001; 2001JP-00328430.  
 XX 25-OCT-2001; 2001JP-00328430.  
 XX (TAIS ) TAISHO PHARM CO LTD.  
 XX (GENE-) GENE TECHNO SCI KK.  
 XX WPI; 2003-817833/77.  
 XX N-PSDB; ADJ65998.  
 XX New therapeutic agent, useful for treating endotoxin induced disease,  
 XX comprises fusion protein of Herpes virus entry mediator protein and  
 XX immunoglobulin.  
 PS Claim 5; SEQ ID NO 2; 11pp; Japanese.

XX The invention comprises a therapeutic agent for treating endotoxin  
CC induced disease, the therapeutic agent contains a fusion protein of the  
CC Herpes virus entry mediator (HVEM) protein and an immunoglobulin Fc  
CC domain. The therapeutic agent of the invention is useful for treating  
CC endotoxin induced disease, such as endotoxic shock. The present amino  
CC acid sequence represents a human protein which is claimed in the  
CC specification.  
XX  
SQ Sequence 232 AA;  
Query Match 100.0%; Score 1263; DB 7; Length 232;  
Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDDEVKF 60  
DB 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDDEVKF 60  
QY 61 NWYDVGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
DB 61 NWYDVGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
RESULT 8  
ADJ57512  
ID ADJ57512 standard; protein; 232 AA.  
XX AC ADJ57512;  
XX  
XX 06-MAY-2004 (first entry)  
XX Human IgG1 Fc domain fragment.  
XX TF; tissue factor; FVIIa; factor VII; anticoagulant; thrombolytic;  
KW cerebroprotective; cytosolic; vasotropic; antithrombotic; antiarthritic;  
KW antiarteriosclerotic; antiinflammatory; antibacterial; immunosuppressive;  
KW hypertensive; cardiant; coagulation Factor VII; human; immunoglobulin G1;  
KW IgG1.  
XX  
XX Homo sapiens.  
XX WO2004006962-A2.  
XX  
XX 22-JAN-2004.  
XX  
XX 09-JUL-2003; 2003WO-DK000481.  
XX  
XX 12-JUL-2002; 2002DK-00001099.  
XX  
XX (NOVO ) NOVO NORDISK AS.  
XX  
XX Bjorn SE, Nicolaisen EM, Steenstrup TD;  
PI WPI; 2004-180224/17.  
XX  
XX New compound binding to tissue factor, useful for treating diseases such  
PT as angiogenesis, ischemia/reperfusion, and rheumatoid arthritis.  
XX  
XX Claim 16; SEQ ID NO 7; 61pp; English.  
XX  
XX The invention relates to a compound (I) binding to tissue factor (TF).  
CC The compound (I) has the formula A-(LM)-C, where A is a FVIIa  
CC polypeptide, LM is an optional linker group, C comprises an  
CC immunostimulatory effector domain, and (I) binds to TF. (I) inhibits TF-

CC mediated activated factor VII (FVIIa) activity. (I) is useful as a  
CC medicament, and for the manufacture of a medicament for preventing or  
CC treating disease or disorder associated with pathophysiological TF  
CC activity. The disease or disorder associated with pathophysiological TF  
CC activity are deep venous thrombosis, arterial thrombosis, post surgical  
CC thrombosis, coronary artery bypass graft (CABG), percutaneous transluminal  
CC coronary angioplasty (PTCA), stroke, cancer, tumor metastasis,  
CC angiogenesis, ischemia/reperfusion, rheumatoid arthritis, thrombolysis,  
CC arteriosclerosis and stenosis following angioplasty, acute and chronic  
CC indications such as inflammation, septic shock, septicemia, hypotension,  
CC adult respiratory distress syndrome (ARDS), disseminated intravascular  
CC coagulopathy (DIC), pulmonary embolism, platelet deposition, myocardial  
CC infarction, or prophylactic treatment of mammals with atherosclerotic  
CC vessels at risk for thrombosis. The present sequence represents the Fc  
CC domain fragment of human immunoglobulin G1 (IgG1).  
XX  
SQ Sequence 232 AA;  
Query Match 100.0%; Score 1263; DB 8; Length 232;  
Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDDEVKF 60  
DB 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDDEVKF 60  
QY 61 NWYDVGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
DB 61 NWYDVGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
RESULT 9  
ADJ48992  
ID ADJ48992 standard; peptide; 232 AA.  
XX AC ADJ48992;  
XX  
XX 02-DEC-2004 (first entry)  
XX  
XX Human IgG1 hinge and CH2 region.  
XX  
XX antianaemic; nephrotropic; human; HuEPO-L-vFc; erythropoietin; EPO;  
KW anaemia; renal disease; cancer chemotherapy; rheumatoid arthritis;  
KW AZT treatment; HIV infection; myelodysplastic syndrome; renal failure.  
XX  
XX Homo sapiens.  
XX  
XX US2004175824-A1.  
XX  
XX 09-SEP-2004.  
XX  
XX 21-JAN-2004; 2004US-00761593.  
XX  
XX 17-AUG-2001; 2001US-00932812.  
XX  
XX (SUNL/) SUN L K.  
XX (SUNB/) SUN B N C.  
XX (SUNC/) SUN C R Y.  
XX  
XX Sun LK, Sun BNC, Sun CRY;  
XX  
XX WPI; 2004-634851/61.  
XX  
XX New recombinant HuEPO-L-vFc fusion protein comprises human erythropoietin  
PT (HuEPO), a peptide linker, and a human IgG Fc variant, useful for

treating chronic anemia due to renal diseases, cancer chemotherapy, or rheumatoid arthritis.

Disclosure; SEQ ID NO 26; 31pp; English.

A recombinant HuEPO-L-vfc fusion protein comprises human erythropoietin (HuEPO), a peptide linker, and a human IgG Fc variant, is new. INDEPENDENT CLAIMS are also included for the following: a chinese hamster ovary (CHO)-derived cell line producing the HuEPO-L-vfc fusion protein in its growth medium in excess of 10 microg per million cells in a 24 hour period; and a method for making a recombinant fusion protein comprising HuEPO, a flexible peptide linker, and a human IgG Fc variant. Preferred Protein: The peptide linker containing 20 or fewer amino acids is present between HuEPO and the human IgG Fc variant, and comprises two or more amino acids selected from glycine, serine, alanine, and threonine. The human IgG Fc variant comprises a hinge, CH2, and CH3 domains of human IgG2 with Pro31Ser mutation comprising 436 amino acids (SEQ ID NO. 18). It also comprises a hinge, CH2, and CH3 domains of human IgG4 with Ser228Pro and Leu235Ala mutations comprising 437 amino acids (SEQ ID NO. 20). It further comprises a hinge, CH2, and CH3 domains of human IgB1 with Leu234Val, Leu235Ala, and Pro31Ser mutations comprising 435 amino acids (SEQ ID NO. 22). The HuEPO-L-vfc fusion protein exhibits in vitro biological activity similar to or higher than that of rHuEPO on a molar basis. Preferred CHO-Derived Cell Line: The CHO-derived cell line producing the HuEPO-L-vfc fusion protein in its growth medium in excess of 30 microg per million cells in a 24 hour period. The human IgG Fc variant comprises a hinge, CH2, CH3 domains of human IgG selected from IgB1 as SEQ ID NO. 22, IgG2 as SEQ ID NO. 18, and IgG4 as SEQ ID NO. 20, the IgG Fc contains amino acid mutations to attenuate effector functions, a flexible peptide linker containing 20 or fewer amino acids is present between HuEPO and human IgG Fc variant, and the HuEPO-L-vfc fusion protein exhibits in vitro biological activity similar to or higher than that of rHuEPO on a molar basis. Preferred Method: Making a recombinant fusion protein comprising HuEPO, a flexible peptide linker, and a human IgG Fc variant comprises: generating a CHO-derived cell line; growing the cell line where the recombinant protein is expressed in its growth medium in excess of 10 microg per million cells in a 24 hour period; and purifying the expressed protein from (b), where the recombinant fusion protein exhibits in vitro biological activity similar to or higher than that of rHuEPO on a molar basis. Antianemic; Nephrotropic. No biological data given. None given. Administration can be through subcutaneous or intravenous route. No dosage given. The recombinant HuEPO-L-vfc fusion protein is useful for treating patients with chronic anemia due to renal diseases, cancer chemotherapy, rheumatoid arthritis, A2T treatment for HIV infection, or myelodysplastic syndrome. It is also useful in the treatment of renal failure. A fusion protein was assembled from several DNA segments. To obtain the gene encoding the leader peptide and mature protein of human erythropoietin (EPO), cDNA library of human fetal liver or kidney was used as the template in polymerase chain reaction (PCR). For the convenience of cloning, SEQ ID NO. 1 which incorporates a restriction enzyme cleavage site is used as the 5' oligonucleotide primer. The 3' primer (SEQ ID NO. 2) eliminates the EPO termination codon and incorporates a BamHI site. The resulting DNA fragments of approximately 600 bp were inserted into a holding vector such as pUC19 at the HindIII and BamHI sites to give the pEPO plasmid. The sequence of the human EPO gene was confirmed by DNA sequencing.

XX Sequence 232 AA;

Query Match 100.0%; Score 1263; DB 8; Length 232;  
Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180

Db 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232  
Db 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232

# RESULT 10

ABB09463

ID ABB09463 standard; protein; 233 AA.

XX ABB09463;

XX 01-JUL-2002 (first entry)

XX Human IgG Fc fragment amino acid sequence.

XX Protein A; immunoglobulin G; IgG; antibody; human.

XX Homo sapiens.

XX Key Location/Qualifiers

XX Misc-difference 168

XX /note= "encoded by GAC"

XX Misc-difference 169

XX /note= "encoded by ACC"

XX WO200204602-A1.

XX 17-JAN-2002.

XX 04-JUL-2001; 2001WO-JP005788.

XX 07-JUL-2000; 2000JP-00206689.

XX (GENC-) GENCOM CORP.

XX Tanaka A, Ueda M, Teranishi Y;

XX WPI; 2002-148174/19.

XX N-PSDB; ABUS2834.

XX Transformant yeast for stable supply of highly active catalytic antibody, comprises the capability of expressing and presenting protein A or its fragment, particularly with the Z2 domain, on the cell surface.

XX Example 3; Fig 4; 25pp; Japanese.

XX The invention relates to a transformant yeast that can present protein A or its fragment on its cell surface. The yeast can be used for detecting or isolating the Fc part of immunoglobulin (Ig)G. The yeast is useful for a stable supply of highly active catalytic antibody e.g. by screening novel functional molecules and in isolating Fc-carrying secretory proteins. The yeast of the invention is capable of adhering specifically to a combinatorial antibody library with an Fc-carrying antibody component. The current sequence represents the human IgG Fc fragment amino acid sequence

XX Sequence 233 AA;

Query Match 100.0%; Score 1263; DB 5; Length 233;  
Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 2 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 61  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 62 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 121  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180

Db 122 ISKAKQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSGQPENNYKTTTP 181  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKSLSPGK 232  
 Db 182 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKSLSPGK 233  
 RESULT 11  
 ABJ38647  
 ID ABJ38647 standard; protein; 235 AA.  
 XX  
 AC ABJ38647;  
 DT 26-JUN-2003 (first entry)  
 XX  
 DE PCXFc protein SEQ ID No 6.  
 XX  
 KW Cytostatic; osteopathic; cerebroprotective; dermatological; enzyme;  
 KW antigen binding; receptor protein tyrosine kinase; skeletal dysplasia;  
 KW constitutive activation; craniosynostosis; cell proliferative disorder;  
 KW achondroplasia; thanatophoric dysplasia; acanthosis nigricans dysplasia;  
 KW hypochondroplasia; severe achondroplasia; transitional cell carcinoma;  
 KW Muenke coronal craniosynostosis; Crouzin syndrome; acanthosis nigricans;  
 KW tumour progression; osteosarcoma; chondrosarcoma; multiple myeloma;  
 KW mammary carcinoma; fibroblast growth factor receptor 3; FGFR3 protein.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2002102854-A2.  
 XX  
 PD 27-DEC-2002.  
 XX  
 PF 20-JUN-2002; 2002WO-IB003523.  
 XX  
 PR 20-JUN-2001; 2001US-0299187P.  
 XX  
 PA (MORP-) MORPHOSYS AG.  
 PA (PROC-) PROCHON BIOTECH LTD.  
 XX  
 PI Thomassen-Wolf E, Borges E, Yayon A, Rom E;  
 XX  
 DR WPI; 2003-167489/16.  
 DR N-PSDB; ABT40262.  
 XX  
 PT New molecules having the antigen-binding portion of antibodies that block  
 PT activation of receptor protein tyrosine kinase, useful for treating or  
 PT inhibiting skeletal dysplasias, craniosynostosis or cell proliferative  
 PT disorders.  
 XX  
 PS Example 2; Page 38; 103pp; English.  
 XX  
 CC The invention relates to a novel molecule comprising the antigen binding  
 CC portion of an isolated antibody, which has an increased affinity for a  
 CC receptor protein tyrosine kinase and which blocks constitutive activation  
 CC of the receptor protein tyrosine kinase. The methods and compositions of  
 CC the invention are useful for treating or inhibiting a skeletal dysplasia,  
 CC craniosynostosis or a cell proliferative disorder. The skeletal dysplasia  
 CC is achondroplasia, thanatophoric dysplasia, hypochondroplasia, severe  
 CC achondroplasia with developmental delay or acanthosis nigricans  
 CC dysplasia. The craniosynostosis disorder is Muenke coronal  
 CC craniosynostosis or Crouzin syndrome with acanthosis nigricans. The cell  
 CC proliferative disorder is tumour progression that is progression of  
 CC transitional cell carcinoma, osteosarcoma, chondrosarcoma, multiple  
 CC myeloma or mammary carcinoma. This sequence represents a protein derived  
 CC from a PCXFc plasmid DNA vector relating to the protein tyrosine kinase  
 CC inhibitor of the invention  
 XX  
 SQ Sequence 235 AA;  
 Query Match 100.0%; Score 1263; DB 6; Length 235;  
 Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 4 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 63  
 QY 61 NMVYDGVVHNNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 64 NMVYDGVVHNNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 123  
 QY 121 ISKAKQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSGQPENNYKTTTP 180  
 Db 124 ISKAKQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSGQPENNYKTTTP 183  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKSLSPGK 232  
 Db 184 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKSLSPGK 235  
 RESULT 12  
 ADA89055  
 ID ADA89055 standard; protein; 235 AA.  
 XX  
 AC ADA89055;  
 XX  
 DT 20-NOV-2003 (first entry)  
 XX  
 DE Plasmid pCXFc amino acid sequence SEQ ID NO:6.  
 XX  
 KW antigen binding; antibody; specific binding affinity;  
 KW receptor protein tyrosine kinase; RPTK;  
 KW receptor protein tyrosine kinase inhibitor;  
 KW fibroblast growth factor receptor; FGFR; osteopathic; cytostatic;  
 KW ophthalmological; bone disorder; cartilage disorder; skeletal disorder;  
 KW skeletal dysplasia; achondroplasia; thanatophoric dysplasia;  
 KW hypochondroplasia; craniosynostosis disorder;  
 KW malignant cell proliferative disease; cancer;  
 KW non-neoplastic angiogenic pathologic condition.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 PN WO2002102973-A2.  
 XX  
 PD 27-DEC-2002.  
 XX  
 PF 20-JUN-2002; 2002WO-IL000495.  
 XX  
 PR 20-JUN-2001; 2001US-0299187P.  
 XX  
 PA (PROC-) PROCHON BIOTECH LTD.  
 XX  
 PI Yayon A, Rom E;  
 XX  
 DR WPI; 2003-175236/17.  
 DR N-PSDB; ADA89054.  
 XX  
 PT New antibodies which have specific binding affinity for a receptor  
 PT protein tyrosine kinase (RPTK) and block constitutive activation of RPTK,  
 PT useful for treating bone and cartilage disorders, or malignant cell  
 PT proliferative diseases.  
 XX  
 PS Example 2; Page 43; 122pp; English.  
 XX  
 CC The present invention describes a molecule (I) comprising the antigen  
 CC binding portion of an isolated antibody which has specific binding  
 CC affinity for a receptor protein tyrosine kinase (RPTK), particularly for  
 CC a fibroblast growth factor receptor (FGFR), and which blocks constitutive  
 CC activation of an RPTK. Also described: (1) pharmaceutical compositions  
 CC comprising (I) as an active ingredient and a pharmaceutical carrier,  
 CC excipient, or auxiliary agent; (2) a kit comprising (I), at least one  
 CC reagent for detecting the presence of (I) when bound to the RPTK, and  
 CC instructions for use; (3) a method for treatment of bone and cartilage  
 CC related disorders by administering a composition of (1) to the subject;

CC (4) a method for treating or inhibiting a cell proliferative disease or  
CC disorder by administering the composition of (1); (5) a method for  
CC screening a molecule comprising the antigen-binding portion of an  
CC antibody which blocks ligand-dependent activation of RPTK; (6) an  
CC CDR3 DNA region; (7) an isolated nucleic acid molecule encoding VL region  
CC and a VH region; (8) vectors comprising a nucleic acid molecule of (6) or  
CC (7); and (9) host cells transformed with the vector. (I) have  
CC osteopathic, cytostatic and ophthalmological activities, and can be used  
CC as a RPTK inhibitor. Compositions comprising (I) are useful for treating  
CC bone and cartilage disorders, including skeletal disorders such as  
CC skeletal dysplasia (achondroplasia, thanatophoric dysplasia,  
CC hypochondroplasia, severe achondroplasia with developmental delay and  
CC acanthosis nigricans dysplasia) or a craniosynostosis disorder (e.g.  
CC Muenke coronal craniosynostosis or Crouzon syndrome with acanthosis  
CC nigricans). The composition may also be used for treating or inhibiting  
CC malignant cell proliferative disease or disorder associated with abnormal  
CC RPTK activity, including a haematopoietic malignancy (e.g. multiple  
CC myeloma), solid tumours (e.g. mammary, colon, cervical, bladder,  
CC colorectal, chondrosarcoma or osteosarcoma), tumour formation, primary  
CC tumours, tumour progression (particularly progression of transitional  
CC cell carcinoma or mammary carcinoma), or tumour metastasis, where the  
CC cell proliferative disorder may be associated with the action of a  
CC constitutively activated RPTK, or with ligand-dependent activation of  
CC RPTK. The composition may further be used for treating  
CC hyperproliferative diseases and disorders associated with ligand-  
CC dependent FGFR signaling, such as vision disorders (e.g. neovascular  
CC glaucoma, macular degeneration and proliferative retinopathy including  
CC diabetic retinopathy), and non-neoplastic angiogenic pathologic  
CC conditions (e.g. haemangiomas, angiofibromas and psoriasis). The present  
CC sequence is given in the exemplification of the present invention.  
XX  
SQ Sequence 235 AA;

Query Match 100.0%; Score 1263; DB 6; Length 235;  
Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHCTCPAPPELLGSPVFLFPFKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 4 EPKSCDKTHCTCPAPPELLGSPVFLFPFKDITLMISRTPEVTCVVVDVSHEDPEVKF 63  
QY 61 NNYVDGVEVHNAKTPREEQYNSTRYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 64 NNYVDGVEVHNAKTPREEQYNSTRYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 123  
QY 121 ISKAGQPEPQVYTLPPSRDELTKNOVSLTCLVKGFPESDIAVESNGQENNYKTP 180  
Db 124 ISKAGQPEPQVYTLPPSRDELTKNOVSLTCLVKGFPESDIAVESNGQENNYKTP 183  
QY 181 PVLDSGSEFLYSLKLTVDKSRWQGNVFCSCVWHEALHNHYTQKSLSLSPGK 232  
Db 184 PVLDSGSEFLYSLKLTVDKSRWQGNVFCSCVWHEALHNHYTQKSLSLSPGK 235

RESULT 13  
ADD25647  
XX ID ADD25647 standard; protein; 235 AA.  
XX AC ADD25647;  
XX AD ADD25647;  
XX 15-JAN-2004 (first entry)  
XX Binding domain-immunoglobulin fusion protein-associated protein #101.  
XX Binding domain; immunoglobulin; fusion protein; cytostatic;  
XX antiarthritic; immunosuppressive; antidiabetic; antithyroid;  
XX neuroprotective; hinge region; immunoglobulin heavy chain;  
XX CH2 constant region; CH3 constant region; IgG1;  
XX antibody dependent cell-mediated cytotoxicity; ADCC; complement fixation;  
XX malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma;  
XX rheumatoid arthritis; myasthenia gravis; Grave's disease;  
XX type I diabetes mellitus; multiple sclerosis; autoimmune disease.

XX Unidentified.  
OS US2003118592-A1.  
XX 26-JUN-2003.  
XX 25-JUL-2002; 2002US-00207655.  
XX 17-JAN-2001; 2001US-0367358P.  
XX 17-JAN-2002; 2002US-00053530.  
XX 03-JUN-2002; 2002US-0385691P.  
XX (GENE-) GENE-CRAFT INC.  
XX Ledbetter JA, Hayden-Ledbetter MS, Thompson PA;  
XX WPI; 2003-801317/75.  
XX New binding domain-immunoglobulin fusion protein, useful for treating a  
XX subject having or suspected of having a malignant condition or a B-cell  
XX disorder, e.g. melanoma, Grave's disease or autoimmune disease.  
XX Disclosure; SEQ ID NO 208; 157pp; English.  
XX The invention relates to a binding domain-immunoglobulin fusion protein  
XX comprising a binding domain polypeptide that is fused to an  
XX immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain  
XX CH2 constant region polypeptide that is fused to the hinge region  
XX polypeptide, and an immunoglobulin heavy chain CH3 constant region  
XX polypeptide that is fused to the CH2 constant region polypeptide. The  
XX hinge region polypeptide comprises: a wild-type human IgG1 immunoglobulin  
XX hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge  
XX region polypeptide, derived from (a) having 3 or more cysteine residues;  
XX where the mutated human IgG1 immunoglobulin hinge region polypeptide  
XX contains 2 cysteine residues, where the first cysteine is not mutated; a  
XX mutated human IgG1 immunoglobulin hinge region polypeptide, derived from  
XX (a) having 3 or more cysteine residues, where the mutated human IgG1  
XX immunoglobulin hinge region polypeptide contains no more than one  
XX cysteine residue; and a mutated human IgG1 immunoglobulin hinge region  
XX polypeptide, derived from (a) having 3 or more cysteine residues; where  
XX the mutated human IgG1 immunoglobulin hinge region polypeptide contains  
XX no cysteine residues. The binding domain-immunoglobulin fusion protein is  
XX capable of at least one immunological activity comprising antibody  
XX dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The  
XX binding domain polypeptide is capable of specifically binding to an  
XX antigen. Also included are an isolated polynucleotide encoding the  
XX binding domain-immunoglobulin fusion protein, a recombinant expression  
XX construct comprising the polynucleotide (operably linked to a promoter),  
XX a host cell transformed or transfected with a recombinant expression  
XX construct, producing the binding domain-immunoglobulin fusion protein, a  
XX pharmaceutical composition comprising the binding domain-immunoglobulin  
XX fusion protein or polynucleotide and a carrier, and treating a subject  
XX having or suspected of having a malignant condition or a B-cell disorder.  
XX The binding domain-immunoglobulin fusion protein is useful for treating a  
XX subject having or suspected of having a malignant condition or a B-cell  
XX disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis,  
XX myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple  
XX sclerosis or autoimmune disease. The present sequence is a binding domain  
XX -immunoglobulin fusion protein-associated protein sequence. Note: The  
XX sequence data for this patent formed part of the printed specification  
XX and is also available in electronic format directly from USPTO at  
XX seqdata.uspto.gov/sequence.html?DocID=20030118592. The authors have not  
XX identified the sequences in the printed specification by their SEQ ID  
XX number therefore none of the sequences can be explicitly identified.

XX Sequence 235 AA;  
SQ Query Match 100.0%; Score 1263; DB 7; Length 235;  
Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHCTCPAPPELLGSPVFLFPFKDITLMISRTPEVTCVVVDVSHEDPEVKF 60

Db 4 EPKSCDKHTTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 63  
QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120  
Db 64 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 123  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 124 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 183  
QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
Db 184 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 235

RESULT 14  
ADG74307  
ID ADG74307 standard; protein; 235 AA.  
AC ADG74307;  
XX  
DT 11-MAR-2004 (first entry)  
XX  
DE Fibroblast growth factor receptor 3 (FGFR3) extracellular domain protein.  
XX  
KW antigen binding; receptor protein tyrosine kinase;  
KW fibroblast growth factor receptor 3; FGFR3; osteopathic; cytostatic;  
KW neurotropic; neuroprotective; ophthalmological; antidiabetic; gene therapy;  
KW bone; cartilage; craniosynostosis; skeletal dysplasia;  
KW cell proliferative disorder; haematopoietic malignancy;  
KW hyperproliferative disorder; neurovascular glaucoma;  
KW macular degeneration; proliferative retinopathy; diabetic retinopathy.  
XX  
OS Unidentified.  
XX  
PN WO2002102972-A2.  
XX  
PD 27-DEC-2002.  
XX  
PF 20-JUN-2002; 2002WO-11000494.  
XX  
XX 20-JUN-2001; 2001US-0299187P.  
XX  
PA (PROC-) PROCHON BIOTECH LTD.  
PA (MORP-) MORPHOSYS AG.  
XX  
PI Yayon A, Rom E, Thomassen-Wolf E, Borges E;  
XX  
XX WPI; 2003-175235/17.  
XX  
XX New antigen binding portion of an antibody having a specific binding  
XX affinity for a receptor protein tyrosine kinase, useful for treating bone  
XX PT and cartilage related disorders, cell proliferative or hyperproliferative  
XX PT disorders.  
XX  
PS Example 2; SEQ ID NO 6; 122bp; English.  
XX  
XX The invention relates to a novel molecule comprising the antigen binding  
XX portion of an isolated antibody having a specific binding affinity for a  
XX receptor protein tyrosine kinase, and which blocks constitutive  
XX CC activation of a receptor protein tyrosine kinase, such as fibroblast  
XX CC growth factor receptor 3 (FGFR3). The novel molecules of the invention  
XX CC have the following activities: osteopathic, cytostatic, neurotropic,  
XX CC neuroprotective, ophthalmological, and antidiabetic. The nucleic acids  
XX CC encoding the novel molecules of the invention can be used in gene therapy  
XX CC to treat disorders. The molecule and nucleic acid molecules are useful  
XX CC for treating bone and cartilage related disorders such as  
XX CC craniosynostosis (e.g. Muenke coronal craniosynostosis or Crouzon  
XX CC syndrome with acanthosis nigricans), or skeletal dysplasia (e.g.  
XX CC achondroplasia, thanatophoric dysplasia (TD), hypochondroplasia, severe  
XX CC achondroplasia with developmental delay and acanthosis nigricans (SADDAN)  
XX CC dysplasia), cell proliferative disorders, haematopoietic malignancy (e.g.

CC multiple myeloma), hyperproliferative disorders, neurovascular glaucoma,  
CC macular degeneration or proliferative retinopathy including diabetic  
CC retinopathy. This sequence represents the protein of the fibroblast  
CC growth factor receptor 3 (FGFR3) extracellular domain of the invention.  
XX  
SQ Sequence 235 AA;  
Query Match 100.0%; Score 1263; DB 7; Length 235;  
Best Local Similarity 100.0%; Pred. No. 1.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKHTTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 4 EPKSCDKHTTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 63  
QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120  
Db 64 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 123  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 124 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 183  
QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
Db 184 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 235

RESULT 15  
AAE26274  
ID AAE26274 standard; protein; 247 AA.  
XX  
AC AAE26274;  
XX  
DT 14-NOV-2002 (first entry)  
XX  
DE Human beta amyloid-IgG1 Fc fusion protein.  
XX  
KW Human; amyloidogenic protein; Alzheimer's disease; Huntington's disease;  
KW spongiform encephalopathy; familial amyloid cardiomyopathy; amyloidosis;  
KW Gerstmann-Strausler-Scheinker syndrome; spongiform encephalopathy; GSS;  
KW Creutzfeldt-Jacob disease; insulinoma; diabetes; body myocytosis; myeloma;  
KW C $\beta$ ; beta amyloid; Fc region; chimeric.  
XX  
OS Homo sapiens.  
XX  
XX WO200242462-A2.  
XX  
PD 30-MAY-2002.  
XX  
XX 27-NOV-2001; 2001WO-US044581.  
XX  
XX 27-NOV-2000; 2000US-0253302P.  
XX 29-NOV-2000; 2000US-0250198P.  
XX 20-DEC-2000; 2000US-0257186P.  
XX  
XX (PRAE-) PRAECIS PHARM INC.  
XX  
PI Gefter ML, Israel DI, Joyal JL, Gosselin M;  
XX  
XX WPI; 2002-636427/68.  
XX  
XX Novel therapeutic agent useful for treating an amyloidogenic disorder,  
XX e.g. Alzheimer's disease, comprises an immunoglobulin heavy chain  
XX PT constant region linked to a peptide capable of binding amyloidogenic  
XX PT protein.  
XX  
XX Example 10; Page 78-79; 79pp; English.  
XX  
XX The invention relates to a compound comprising an immunoglobulin (Ig)  
XX heavy chain constant region or its fragment that retains the ability to  
XX CC bind an Fc receptor linked by a linker group or a direct bond to a  
XX CC peptide capable of binding an amyloidogenic protein. The invention is

CC useful for clearing an amyloidogenic protein such as beta-amyloid,  
 CC transthyretin (TTR), prion protein (PrP), islet amyloid polypeptide  
 CC (IAPP), atrial natriuretic factor (ANF), kappa light chain, lambda light  
 CC chain, amyloid A, procalcitonin, cystatin C, beta2-microglobulin, ApoA-I,  
 CC gelsolin, calcitonin, fibrinogen, huntington, alpha-synuclein and  
 CC lysozyme from a subject and for treating an amyloidogenic disorder such  
 CC as Alzheimer's disease and spongiform encephalopathy. Disorders treatable  
 CC include those caused or characterised by deposits of TTR (eg. familial  
 CC amyloid cardiomyopathy), PrP (eg. spongiform encephalopathies, including  
 CC scrapie in sheep, bovine spongiform encephalopathy in cows and  
 CC Creutzfeldt-Jacob disease (CJ) and Gerstmann-Straussler-Scheinker  
 CC syndrome (GSS) in humans), IAPP (eg. insulinoma, adult onset diabetes),  
 CC ANF (eg. isolated atrial amyloid), kappa or lambda light chain (eg.  
 CC idiopathic amyloidosis, myeloma), amyloid A (eg. amyloidosis), Apo A-I  
 CC (eg. hereditary non-neuropathic systemic amyloidosis), Gelsolin (eg.  
 CC familial amyloidosis of Finnish type), Fibrinogen (eg. hereditary renal  
 CC amyloidosis), Lysozyme (eg. hereditary systemic amyloidosis). Other  
 CC examples of amyloidogenic disorders include Huntington's disease and  
 CC inclusion body myocytis. The present sequence is human beta amyloid (16-  
 CC 30 amino acids)-IgG1 Fc region fusion protein  
 XX  
 XX Sequence 247 AA;

Query Match 100.0%; Score 1263; DB 5; Length 247;  
 Best Local Similarity 100.0%; Pred. No. 1.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCPPELGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 Db 16 EPKSCDKTHCPPELGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 75  
 QY 61 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 76 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 135  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180  
 Db 136 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 195  
 QY 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFSCSVNHEALHNHYTQKSLSLSPGK 232  
 Db 196 PVLDSGDSFFLYSKLTVDKSRWQGNVFSCSVNHEALHNHYTQKSLSLSPGK 247

RESULT 16  
 ABB81490  
 ID ABB81490 standard; protein; 251 AA.  
 XX  
 AC ABB81490;  
 XX  
 XX 02-SEP-2002 (first entry)  
 XX  
 DE Human immunoglobulin gamma1 constant region protein SEQ ID NO:18.  
 XX  
 KW Human; Ztnfr12; tumour necrosis factor receptor; cytostatic;  
 KW immunosuppressive; dermatological; antiinflammatory; antidiabetic;  
 KW neuroprotective; antirheumatic; antiarthritic; antiasthmatic;  
 KW nephrotropic; hypotensive; gene therapy; B lymphocyte; tumour;  
 KW autoimmune disorder; systemic lupus erythematosus; myasthenia gravis;  
 KW multiple sclerosis; insulin dependent diabetes mellitus; asthma;  
 KW rheumatoid arthritis; bronchitis; emphysema; renal disease; lymphoma;  
 KW glomerulonephritis; vasculitis; chronic lymphoid leukaemia; nephritis;  
 KW pyelonephritis; renal neoplasm; multiple myeloma; amyloidosis;  
 KW light chain neuropathy; hypertension; large vessel disease;  
 KW graft-versus host disease; graft rejection; Crohn's disease.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200238766-A2.  
 PN  
 XX  
 PD 16-MAY-2002.  
 PD  
 XX  
 PF 05-NOV-2001; 2001WO-US047018.

XX  
 PR 07-NOV-2000; 2000US-0246449P.  
 PR 20-DEC-2000; 2000US-0257131P.  
 PR 28-JUN-2001; 2001US-0301715P.  
 PR 29-AUG-2001; 2001US-0315565P.  
 XX  
 PA (ZYMO ) ZYMOGENETICS INC.  
 XX  
 XX Gross JA, Xu W, Henne RM, Grant FJ;  
 PI WPI; 2002-508212/54.  
 DR N-PSDB; ABB89435.  
 XX  
 DR Novel isolated human tumor necrosis factor receptor polypeptide, termed  
 XX Ztnfr 12, useful for treating autoimmune disorders, emphysema, end stage  
 PT renal failure or renal disease and lymphoma.  
 PT  
 XX Example 4; Page 143; 154pp; English.  
 XX  
 CC The present invention describes a human tumour necrosis factor receptor  
 CC designated Ztnfr12 (I). (I) has cytostatic, immunosuppressive,  
 CC dermatological, antiinflammatory, neuroprotective, antidiabetic,  
 CC antirheumatic, antiarthritic, antiasthmatic, nephrotropic and hypotensive  
 CC activities, and can be used in gene therapy. (I) can be used for  
 CC inhibiting, in a mammal, the activity of a ligand that binds Ztnfr12  
 CC (e.g. ZTNF4), for treating disorders and diseases associated with B  
 CC lymphocytes, activated B lymphocytes or resting B lymphocytes, and for  
 CC inhibiting the proliferation of tumour cells. (I) is useful for treating  
 CC autoimmune disorders such as systemic lupus erythematosus, myasthenia  
 CC gravis, multiple sclerosis, insulin dependent diabetes mellitus, asthma,  
 CC rheumatoid arthritis, bronchitis, emphysema and end stage renal failure  
 CC or renal disease such as glomerulonephritis, vasculitis, chronic lymphoid  
 CC leukaemia, nephritis, and pyelonephritis, and for treating renal  
 CC neoplasms, multiple myelomas, lymphomas, light chain neuropathy, or  
 CC amyloidosis, hypertension, large vessel diseases, graft-versus host  
 CC disease, graft rejection and Crohn's disease. (I) is useful for  
 CC modulating the immune system, for regulating B cell responses and  
 CC development, for modulating development of other cells, antibody  
 CC production and cytokine production, and for modulating T and B cell  
 CC communication. Human Ztnfr12 is located to chromosome 22q13.2. The  
 CC present sequence represents human immunoglobulin gamma1 constant region,  
 CC which is used in an example from the present invention  
 XX  
 XX Sequence 251 AA;  
 QY Query Match 100.0%; Score 1263; DB 5; Length 251;  
 Db Best Local Similarity 100.0%; Pred. No. 1.7e-91;  
 QY Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Db 1 EPKSCDKTHCPPELGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 QY 20 EPKSCDKTHCPPELGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 79  
 QY 61 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 80 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 139  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180  
 Db 140 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 199  
 QY 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFSCSVNHEALHNHYTQKSLSLSPGK 232  
 Db 200 PVLDSGDSFFLYSKLTVDKSRWQGNVFSCSVNHEALHNHYTQKSLSLSPGK 251  
 XX  
 XX RESULT 17  
 XX AAB35214  
 XX ID AAB35214 standard; protein; 251 AA.  
 XX  
 XX AC AAB35214;  
 XX  
 XX 28-MAY-2003 (first entry)  
 XX  
 XX

```
XX DE Human wild-type immunoglobulin gamma1 region.
XX DE
XX DE Transmembrane activator; calcium modulator; nephrotropic; antibacterial;
KW TACI; tumour necrosis factor-like protein; ZNF2; ZNF4; immunoglobulin;
KW anaemia; gene therapy; cytostatic; antiinflammatory; immunosuppressive;
KW glomerulonephritis; asthma; bronchitis; graft rejection; septic shock;
KW dermatological; neuroprotective; cyclophilin ligand-interactor; human;
KW autoimmune disease; systemic lupus erythematosus; multiple sclerosis;
KW diabetes mellitus; rheumatoid arthritis; renal disease; inflammation.
XX OS
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
FT Binding-site 38...41
FT /note= "FcgammaRI binding site"
XX
XX WO200294852-A2.
XX
XX 28-NOV-2002.
XX
XX 20-MAY-2002; 2002WO-US015910.
XX
XX 24-MAY-2001; 2001US-0293343P.
XX
XX (ZYMO ) ZYMOGENETICS INC.
XX
XX Rixon MW, Gross JA;
XX WPI; 2003-148455/14.
XX N-PSDB; AAD53735.
XX
XX Transmembrane activator and calcium modulator and cyclophilin ligand-
PT interactor (TACI)-immunoglobulin fusion protein, for treating cancer or
PT diabetes, comprises a TACI receptor group and an immunoglobulin group.
XX
XX Example 1; Col 92-93; 71pp; English.
XX
XX The invention relates to fusion proteins comprising transmembrane
XX activator and calcium modulator and cyclophilin ligand-interactor (TACI)
XX receptor group that binds tumour necrosis factor-like protein (ZNF2 or
XX ZNF4; and an immunoglobulin group comprising a constant region of an
XX immunoglobulin. The invention is used to manufacture a medicament for
XX inhibiting the proliferation of tumour cells in a mammalian subject. The
XX composition comprising the fusion protein may also be used in treating
XX autoimmune diseases (e.g. systemic lupus erythematosus, multiple
XX sclerosis, diabetes mellitus, rheumatoid arthritis and asthma), renal
XX diseases (e.g. glomerulonephritis), bronchitis, inflammation, graft
XX rejection, anaemia and septic shock. The fusion proteins are also used in
XX gene therapy. The present sequence is human wild-type immunoglobulin
XX gamma1 region. This sequence is used in the exemplification of the
XX invention
XX
XX SQ Sequence 251 AA;
Query Match 100.0%; Score 1263; DB 6; Length 251;
Best Local Similarity 100.0%; Pred. No. 1.7e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 EPKSCDKTHCTCPCPAPELLGGPSVFLPPKPKDITLMISRTPTVTCVVDVSHEDPEVKF 60
DB 20 EPKSCDKTHCTCPCPAPELLGGPSVFLPPKPKDITLMISRTPTVTCVVDVSHEDPEVKF 79
QY 61 NWTVDGVEVHNATKPREEQYNTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 120
DB 80 NWTVDGVEVHNATKPREEQYNTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 139
QY 121 ISKAKGQPREPQVYTLPPSDELTCKNQSLTCLVKGFPSPDIAVEVESNGQPENNYKTTTP 180
DB 140 ISKAKGQPREPQVYTLPPSDELTCKNQSLTCLVKGFPSPDIAVEVESNGQPENNYKTTTP 199
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVNHEALHNHYTQKSLSLSPGK 232
|||||
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Db 200 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVNHEALHNHYTQKSLSLSPGK 251
RESULT 18
AAY24154
ID AAY24154 standard; protein; 259 AA.
XX
XX AAY24154;
DT 10-SEP-1999 (first entry)
XX
XX Protein from pcD51neg1 comprising human IgG1 Fc region genomic DNA.
XX
XX LDL; denatured; oxidised; arteriosclerosis; hyperlipidaemia;
KW low density lipoprotein; receptor; detection; immunoglobulin;
KW fusion protein.
XX
XX Homo sapiens.
XX OS Synthetic.
XX OS
XX PN WO932520-A1.
XX
XX 01-JUL-1999.
XX
XX 18-DEC-1998; 98WO-JP005744.
XX
XX 19-DEC-1997; 97JP-00364981.
XX 09-DEC-1998; 98JP-00349648.
XX 16-DEC-1998; 98JP-00358170.
XX
XX (NISR ) JAPAN TOBACCO INC.
XX
XX Sawamura T, Kakutani M, Masaki T;
XX WPI; 1999-418906/35.
XX N-PSDB; AAX88533.
XX
XX Fusion peptide for assay of oxidized LDL and for therapeutic use.
XX
XX Example 1; Page 92-96; 105pp; Japanese.
XX
XX The present invention describes a fusion peptide which consists of the
XX extracellular domain of a mammalian oxidized LDL (low density
XX lipoprotein) receptor, fused to a partial heavy chain of a mammalian
XX immunoglobulin containing all or part of the constant region. Oxidized
XX LDL is a denatured form of LDL occurring in patients having
XX arteriosclerosis or hyperlipidaemia, and the fusion peptide can be used
XX for the assay of oxidized LDL in biological samples from such patients,
XX for the diagnosis of the disorders. It can also be used therapeutically
XX for the prevention and treatment of arteriosclerosis and hyperlipidaemia.
XX The present sequence represents the protein from the vector DNA of
XX pcD51neg1 comprising human IgG1 Fc region genomic DNA
XX
XX SQ Sequence 259 AA;
Query Match 100.0%; Score 1263; DB 2; Length 259;
Best Local Similarity 100.0%; Pred. No. 1.7e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 EPKSCDKTHCTCPCPAPELLGGPSVFLPPKPKDITLMISRTPTVTCVVDVSHEDPEVKF 60
DB 28 EPKSCDKTHCTCPCPAPELLGGPSVFLPPKPKDITLMISRTPTVTCVVDVSHEDPEVKF 87
QY 61 NWTVDGVEVHNATKPREEQYNTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 120
DB 88 NWTVDGVEVHNATKPREEQYNTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 147
QY 121 ISKAKGQPREPQVYTLPPSDELTCKNQSLTCLVKGFPSPDIAVEVESNGQPENNYKTTTP 180
DB 148 ISKAKGQPREPQVYTLPPSDELTCKNQSLTCLVKGFPSPDIAVEVESNGQPENNYKTTTP 207
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVNHEALHNHYTQKSLSLSPGK 232
|||||
```

208 PVLDSGSPFLYSLKTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSPGK 259

RESULT 19

AAE26273  
ID AAE26273 standard; protein; 267 AA.

AC AAE26273;

DT 14-NOV-2002 (first entry)

XX Human tPA-delta/16-30/Fc fusion protein.

XX Human amyloidogenic protein; Alzheimer's disease; Huntington's disease;  
KW spongiform encephalopathy; familial amyloid cardiomyopathy; amyloidosis;  
KW Gerstmann-Strausler-Scheinker syndrome; spongiform encephalopathy; GSS;  
KW Creutzfeldt-Jacob disease; insulinoma; diabetes; body myocytis; myeloma;  
KW Cu; tPA; tissue plasminogen activator; Fc region; chimeric.

OS Homo sapiens.

XX WO200242462-A2.

XX 30-MAY-2002.

XX 27-NOV-2001; 2001WO-US044581.

XX 27-NOV-2000; 2000US-0253302P.

XX 29-NOV-2000; 2000US-0250198P.

XX 20-DEC-2000; 2000US-0257186P.

XX (PRAE-) PRACIS PHARM INC.

XX Geffer ML, Israel DI, Joyal JL, Gosselin M;

XX WPI; 2002-636427/69.

XX N-PSDB; AAD43943.

XX Novel therapeutic agent useful for treating an amyloidogenic disorder,

XX e.g. Alzheimer's disease, comprises an immunoglobulin heavy chain

XX constant region linked to a peptide capable of binding amyloidogenic

XX protein.

XX Example 10; Page 77-78; 79pp; English.

XX The invention relates to a compound comprising an immunoglobulin (Ig)  
XX heavy chain constant region or its fragment that retains the ability to  
XX bind an Fc receptor linked by a linker group or a direct bond to a  
XX peptide capable of binding an amyloidogenic protein. The invention is  
XX useful for clearing an amyloidogenic protein such as beta-amyloid,  
XX transthyretin (TTR), prion protein (PrP), islet amyloid polypeptide  
XX (IAPP), atrial natriuretic factor (ANF), kappa light chain, lambda light  
XX chain, amyloid A, procalcitonin, cystatin C, beta2-microglobulin, ApoA-I,  
XX gelsolin, calcitonin, fibrinogen, Huntington, alpha-synuclein and  
XX lysozyme from a subject and for treating an amyloidogenic disorder such  
XX as Alzheimer's disease and spongiform encephalopathy. Disorders treatable  
XX include those caused or characterised by deposits of TTR (eg. familial  
XX amyloid cardiomyopathy), PrP (eg. spongiform encephalopathies, including  
XX scrapie in sheep, bovine spongiform encephalopathy in cows and  
XX Creutzfeldt-Jacob disease (Cu) and Gerstmann-Strausler-Scheinker  
XX syndrome (GSS) in humans), IAPP (eg. insulinoma, adult onset diabetes),  
XX ANF (eg. isolated atrial amyloid), kappa or lambda light chain (eg.  
XX idiopathic amyloidosis, myeloma), amyloid A (eg. amyloidosis), Apo A-I  
XX (eg. hereditary non-neuropathic systemic amyloidosis), Gelsolin (eg.  
XX familial amyloidosis of Finnish type), Fibrinogen (eg. hereditary renal  
XX amyloidosis), lysozyme (eg. hereditary systemic amyloidosis). Other  
XX examples of amyloidogenic disorders include Huntington's disease and  
XX inclusion body myocytis. The present sequence is tPA-delta/16-30/Fc  
XX fusion protein. This protein comprises human IgG1 Fc region, human tissue  
XX plasminogen activator (tPA) peptide and 16-30 amino acids of human beta  
XX amyloid peptide. This sequence is used in the exemplification of the  
XX invention

SQ Sequence 267 AA;

Query Match 100.0%; Score 1263; DB 5; Length 267;  
Best Local Similarity 100.0%; Pred. No. 1.8e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPDILMISRTPEVTCVVVDVSHEDPEVKF 60

DB 36 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPDILMISRTPEVTCVVVDVSHEDPEVKF 95

QY 61 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 120

DB 96 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 155

QY 121 ISKAKGQPREPOVYITLPISRDDELTKNQVSLTCLIVGFPSDIAVWESNGQENNYKTTTP 180

DB 156 ISKAKGQPREPOVYITLPISRDDELTKNQVSLTCLIVGFPSDIAVWESNGQENNYKTTTP 215

QY 181 PVLDSGSPFLYSLKTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSPGK 232

DB 216 PVLDSGSPFLYSLKTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSPGK 267

RESULT 20

ADJ52120

XX ID ADJ52120 standard; protein; 269 AA.

XX AC ADJ52120;

XX DT 06-MAY-2004 (first entry)

XX CH1 deleted mimetibody-related EMP-NfusCG1 amino acid sequence SeqID1112.

XX CH1 deleted mimetibody; osteopathic; cardiovascular-Gen;

XX dermatological-Gen; auditory; endocrine-Gen; gastrointestinal-Gen;

XX gynaecological-Gen; hepatotropic; haemostatic; immunomodulator;

XX anti-allergic; muscular-Gen; cytostatic; antinflammatory; neuroleptic;

XX ophthalmological; nephrotropic; respiratory-Gen; tumour necrosis factor;

XX TNF; cytokine; bone disorder; joint disorder; cardiovascular disorder;

XX dental disorder; oral disorder; dermatological disorder; ear disorder;

XX nose disorder; throat disorder; endocrine disorder; metabolic disorder;

XX gastrointestinal disorder; gynaecological disorder; hepatic disorder;

XX obstetric disorder; haematologic disorder; immunological disorder;

XX allergic disorder; infectious disorder; musculoskeletal disorder;

XX oncological disorder; neurological disorder; nutritional disorder;

XX ophthalmologic disorder; pediatric disorder; psychiatric disorder;

XX renal disorder; pulmonary disorder; EMP-NfusCG1.

XX Unidentified.

XX Synthetic.

XX WO2004002424-A2.

XX 08-JAN-2004.

XX 30-JUN-2003; 2003WO-US020495.

XX 28-JUN-2002; 2002US-0392431P.

XX 19-SEP-2002; 2002US-0412144P.

XX (CENZ ) CENTOCOR INC.

XX Heavner GA, Knight DM, Ghrayeb J, Scallion BJ, Nesspor TC;

XX Kutoloski KA;

XX WPI; 2004-082872/08.

XX New CH1 deleted mimetibody polypeptide and nucleic acid, useful for  
XX diagnosing, preventing or treating cardiovascular, dermatologic,  
XX endocrine, gastrointestinal, gynecologic, infectious, neurologic and  
XX nutritional disorders.

XX Claim 4; SEQ ID NO 1112; 123pp; English.

XX This invention relates to CHI deleted mimetibodies (and the DNA sequences  
 CC which encode them), compositions, methods and uses. The invention may be  
 CC useful for the development of compounds with an osteopathic,  
 CC cardiovascular-Gen, dermatological-Gen, auditory, endocrine-Gen,  
 CC gastrointestinal-Gen, gynaecological-Gen, hepatotropic, haemostatic,  
 CC immunomodulator, antiallergic, muscular-Gen, cyrostatic,  
 CC antiinflammatory, neuroleptic, ophthalmological, nephrotropic or  
 CC respiratory-Gen activity acting as a tumour necrosis factor (TNF)-  
 CC modulator or cytokine-agonist. The methods and compositions of the  
 CC present invention are useful for the diagnosis, prevention and/or  
 CC treatment of diseases or conditions associated with aberrant expression  
 CC or activity of the CHI deleted mimetibody, such as a bone or joint,  
 CC cardiovascular, dental or oral, dermatological, ear, nose or throat,  
 CC endocrine, metabolic, gastrointestinal, gynaecological, hepatic,  
 CC obstructive, haematologic, immunological, allergic, infectious,  
 CC musculoskeletal, oncological, neurological, nutritional, ophthalmologic,  
 CC pediatric, psychiatric, renal or pulmonary disorders. The present  
 CC sequence is the amino acid sequence of EMP-NfusCGL, a mimetibody of the  
 CC invention.  
 XX  
 SQ Sequence 269 AA;

Query Match 100.0%; Score 1263; DB 8; Length 269;  
 Best Local Similarity 100.0%; Pred. No. 1.8e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 38 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 97  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 98 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 157  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 158 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 217  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232  
 DB 218 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 269

RESULT 21  
 AAB47590  
 ID AAB47590 standard; protein; 287 AA.  
 XX  
 AC AAB47590;  
 XX  
 DT 11-SEP-2003 (revised)  
 DT 13-DEC-2001 (first entry)  
 XX  
 DE Fusion protein of HSA:human IgG1 Fc.  
 XX  
 KW Mouse; heat shock antigen; HSA; human; rat; signal transducer; CD24;  
 KW fusion protein; inhibition; autoreactive T cell; atc; autoimmune disease;  
 KW multiple sclerosis; rheumatoid arthritis; systemic lupus erythematosus;  
 KW psoriasis; diabetes; allergy; transplant rejection; transgenic mouse.  
 XX  
 OS Homo sapiens.  
 OS Mus musculus.  
 OS Chimeric.  
 XX  
 PN WO200172325-A1.  
 XX  
 PD 04-OCT-2001.  
 XX  
 XX 29-MAR-2001; 2001WO-US040390.  
 PF  
 PR 29-MAR-2000; 2000US-0192814P.  
 XX  
 XX (OHIS ) UNIV OHIO STATE RES FOUND.

XX Liu Y, Zheng P, Bai X;  
 XX WPI; 2001-611581/70.  
 DR N-PSDB; AAH43523, AAH43524.  
 XX  
 PT Inhibiting tissue destruction by autoreactive T cells, useful for  
 PT treating autoimmune diseases, by administering a heat-shock antigen/CD24  
 PT polypeptide or its antibody.  
 XX  
 PS Disclosure; Fig 10; 34pp; English.  
 XX  
 CC This sequence represents a fusion protein which comprises the mouse heat  
 CC shock antigen (HSA) fused to human IgG1 Fc. This protein may be used in  
 CC the method of the invention for inhibiting destruction of tissue  
 CC initiated by autoreactive T cells (atc). The method is especially used to  
 CC treat subjects suspected of having autoimmune diseases, particularly  
 CC multiple sclerosis, rheumatoid arthritis, systemic lupus erythematosus,  
 CC psoriasis, diabetes and allergy, also transplant rejection. Transgenic  
 CC mice that express human CD24 on their T cells are useful as models for  
 CC testing drugs for use against autoimmune diseases. (Updated on 11-SEP-  
 CC 2003 to standardise OS field)  
 XX  
 SQ Sequence 287 AA;

Query Match 100.0%; Score 1263; DB 4; Length 287;  
 Best Local Similarity 100.0%; Pred. No. 1.9e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 56 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 115  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 116 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 175  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 176 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 235  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232  
 DB 236 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 287

RESULT 22  
 AAR91806  
 ID AAR91806 standard; protein; 329 AA.  
 XX  
 AC AAR91806;  
 XX  
 DT 20-SEP-1996 (first entry)  
 XX  
 DE Human immunoglobulin gamma heavy chain constant region sequences.  
 XX  
 KW alkaline phosphatase; label; antibody; IgG; H-chain; C-region; CH1; CH2;  
 KW CH3; hinge; fusion protein; chimera; immunoassay.  
 XX  
 OS Homo sapiens.  
 XX  
 PN JP08070875-A.  
 XX  
 PD 19-MAR-1996.  
 XX  
 PF 05-SEP-1994; 94JP-00211035.  
 XX  
 PR 05-SEP-1994; 94JP-00211035.  
 XX  
 PA (TOYU ) TOSOH CORP.  
 XX  
 XX WPI; 1996-203155/21.  
 DR N-PSDB; AAT27385.

XX Recombinant alkaline phosphatase (AP)-antibody fusion protein - comprises  
PT AP fused downstream of antibody heavy or light chain, useful as  
PT immunoassay reagent.  
XX

PS Example 1; Page 13-15; 44pp; Japanese.

XX The gene coding for human alkaline phosphatase is fused downstream of a  
CC gene coding for either the variable and CH1 regions of an antibody heavy  
CC chain or an antibody light chain. Coexpression of the H- and L-chain  
CC sequences, one of which is fused to the AP gene, results in production of  
CC AP-labelled antibodies suitable for use in immunoassays. The present  
CC sequence is from a human IgG heavy chain constant region  
XX  
SQ Sequence 329 AA;

Query Match 100.0%; Score 1263; DB 2; Length 329;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 98 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 157  
QY 61 NNYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 158 NNYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 217  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTP 180  
DB 218 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTP 277  
QY 181 PVLDSGDSGFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 232  
DB 278 PVLDSGDSGFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 329

RESULT 23  
ADP56389  
ID ADP56389 standard; protein; 329 AA.  
XX ADP56389;  
XX  
DT 18-NOV-2004 (first entry)  
XX  
DE Human PRO protein sequence SEQ ID NO:2365.  
XX  
KW human; PRO; immune related disease; inflammatory immune response;  
KW immune response stimulation; antiallergic; antianaemic; antiarthritic;  
KW antiaesthetic; antidiabetic; antiinflammatory; antipsoriatic;  
KW antirheumatic; antithyroid; CNS; dermatological; gastrointestinal;  
KW haemostatic; hepatotropic; immunostimulant; immunosuppressive; muscular;  
KW nephrotropic; neuroprotective; osteopathic; respiratory; vasotropic;  
KW virucide; gene therapy.  
XX  
OS Homo sapiens.  
XX  
PN WO2004039956-A2.  
XX  
PD 13-MAY-2004.  
XX  
PF 28-OCT-2003; 2003WO-US034381.  
XX  
PR 29-OCT-2002; 2002US-0422472P.  
XX  
PA (GETH ) GENENTECH INC.  
XX  
PI Aggarwal S, Clark H, Gurney AL, Schoenfeld J, Williams PM;  
PI Wood WI, Wu TD;  
XX  
DR WPI; 2004-376182/35.  
DR N-PSDB; ADP56389.  
XX

PT New PRO polynucleotides and polypeptides, useful in diagnosing  
PT and treating an immune related disease, e.g. systemic lupus  
PT erythematosus, rheumatoid arthritis, diabetes mellitus or asthma and in  
PT stimulating an immune response.  
XX

PS Claim 1; SEQ ID NO 2365; 3009pp; English.

XX The present invention describes an isolated PRO nucleic acid (I). Also  
CC described: (1) a vector comprising (i); (2) a host cell comprising the  
CC vector of (1); (3) a process for producing a PRO polypeptide; (4) an  
CC isolated PRO polypeptide; (5) a chimeric molecule comprising the  
CC polypeptide of (4) fused to a heterologous amino acid sequence; (6) an  
CC antibody which specifically binds to a polypeptide of (4); (7) a  
CC composition of matter comprising a polypeptide of (4), an agonist or  
CC antagonist of the polypeptide or an antibody that binds to the  
CC polypeptide in combination with a carrier; (8) an article of manufacture  
CC comprising a container, a label on the container and a composition of  
CC matter of (7); (9) a method of treating an immune related disease in a  
CC mammal; (10) a method for determining the presence of a PRO polypeptide  
CC in a sample suspected of having the polypeptide; (11) a method of  
CC diagnosing an immune related disease or an inflammatory immune response  
CC in a mammal; (12) a method of identifying a compound that inhibits or  
CC mimics the activity of or expression of a gene encoding a PRO polypeptide  
CC ; and (13) a method of stimulating the immune response in a mammal. The  
CC PRO sequences have antiallergic, antianaemic, antiarthritic,  
CC antiaesthetic, antidiabetic, antiinflammatory, antipsoriatic,  
CC antirheumatic, antithyroid, CNS, dermatological, immunosuppressive, muscular,  
CC haemostatic, hepatotropic, immunostimulant, immunosuppressive, muscular,  
CC nephrotropic, neuroprotective, osteopathic, respiratory, vasotropic and  
CC virucide activities, and can be used in gene therapy. The nucleic acid  
CC (I) and the encoded polypeptides, compositions, kits and methods are  
CC useful in diagnosing and treating an immune related disease and in  
CC stimulating an immune response. The present sequence represents a human  
CC PRO protein from the present invention.  
XX  
SQ Sequence 329 AA;

Query Match 100.0%; Score 1263; DB 8; Length 329;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 98 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 157  
QY 61 NNYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 158 NNYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 217  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTP 180  
DB 218 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTP 277  
QY 181 PVLDSGDSGFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 232  
DB 278 PVLDSGDSGFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 329

RESULT 24  
ADS82579  
ID ADS82579 standard; protein; 329 AA.  
XX ADS82579;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human IgG1 heavy chain C-terminal fragment, SEQ ID 37.  
XX  
KW Immunosuppressive; Cytostatic; Antirheumatic; Antiarthritic;  
KW Antinflammatory; Gastrointestinal; Antipsoriatic; Gene therapy;  
KW antibody; interleukin-21 receptor; interleukin-21; receptor; IL-21;  
KW IL-21R; autoimmune disorder; rheumatoid arthritis;  
KW inflammatory bowel disease; Crohn's disease; transplant rejection;  
KW

KW psoriasis; hyperproliferative disorder; human; IgG1; heavy chain.  
XX Homo sapiens.  
XX WO2004083249-A2.  
XX 30-SEP-2004.  
XX 12-MAR-2004; 2004WO-US007444.  
XX 14-MAR-2003; 2003US-0454336P.  
XX (AMHP ) WYETH.  
PA (CAMP-) CAMBRIDGE ANTIBODY TECHNOLOGY.  
XX Young DA, Whitters MJ, Valge-Archer V, Collins M, Williams AJ;  
PI Witek J;  
XX WPI; 2004-691025/67.  
DR N-PSDB; ADS82580.  
XX New human antibodies that selectively bind to human interleukin-21  
PT receptor, useful for diagnosing, preventing or treating autoimmune  
PT disorders (e.g. rheumatoid arthritis) or hyperproliferative disorders.  
XX Disclosure; SEQ ID NO 37; 143pp; English.  
XX The present invention relates to human antibodies, or their antigen-  
CC binding fragments, that selectively bind to a human interleukin-21  
CC receptor (IL-21R). The antibodies of the invention are referred to as  
CC MUF, MUF-germline, MU11, 18G4, 18A5, 19F5, CP5G2 and R18. The antibodies  
CC selectively bind the extracellular domain of human IL-21R, or inhibit the  
CC binding of IL-21 to an IL-21R. Pharmaceutical compositions comprising an  
CC antibody or fragment of the invention are useful for diagnosing,  
CC preventing or treating autoimmune disorders (e.g. rheumatoid arthritis,  
CC inflammatory bowel disease, Crohn's disease, transplant rejection or  
CC psoriasis) or hyperproliferative disorders. The antibodies of the  
CC invention can comprise a human IgG1 constant domain sequences such as the  
XX present sequence.  
SQ Sequence 329 AA;  
Query Match 100.0%; Score 1263; DB 8; Length 329;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 98 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 157  
QY 61 NWYVDGVEVHNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 158 NWYVDGVEVHNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 217  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPSDIAVEVESNGQPENNYKTTTP 180  
Db 218 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPSDIAVEVESNGQPENNYKTTTP 277  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
Db 278 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 329  
RESULT 25  
ID AAB04071 standard; protein; 330 AA.  
XX AAB04071;  
XX 11-APR-2001 (first entry)  
XX Zcytor 10::IgG gamma fusion peptide.  
XX

KW zcytor 10 cytokine receptor; cytokine; receptor; antibody; ligand;  
KW binding; detection; modulation; recombinant cell; haematopoietic cell;  
KW lymphoid cell; myeloid cell; lymph; immune system; blood; bone;  
KW inflammatory response; inflammation; spleen; human.  
XX Synthetic.  
OS Homo sapiens.  
XX WO2000068381-A1.  
XX 16-NOV-2000.  
XX 11-MAY-2000; 2000WO-US012924.  
XX 11-MAY-1999; 99US-00309861.  
XX (ZYMO ) ZYMOGENETICS INC.  
XX Presnell SR, Foster DC, Hammond AK, Lok S;  
PI WPI; 2001-016096/02.  
DR N-PSDB; AAA54473.  
XX New cytokine receptor mouse zcytor 10, useful for detecting ligands that  
PT stimulate proliferation or development of hematopoietic, lymphoid and  
PT myeloid cells.  
XX Example 17; Page 120-121; 134pp; English.  
XX Isolating a nucleotide which encodes the zcytor 10 cytokine receptor  
CC enables the production of recombinant cells expressing the receptor.  
CC Those cells can then be used to detect the presence of a modulator of  
CC zcytor10 protein by culturing the cells in the presence of a test ligand  
CC and comparing levels of activity of mouse zcytor10 in the presence and  
CC absence of the test sample. Similarly, detection of zcytor10 receptor  
CC ligand within a test sample can be achieved. The method comprising  
CC contacting a test sample containing an amino acid sequence from Cys15 or  
CC Gly25 to Pro230 of the zcytor 10 cytokine receptor and detecting the  
CC binding of the polypeptide to a ligand in the sample. Specified peptide  
CC fragments of the zcytor 10 cytokine receptor and the methods described  
CC are used to identify ligands that stimulate the proliferation and/or  
CC development of haematopoietic, lymphoid and myeloid cells. Peptide  
CC fragments of the cytokine receptor are useful for treating lymphoid,  
CC immune, inflammatory, splenic, blood or bone disorders and for generating  
CC antibodies directed against the receptor. A vector expressing a secreted  
CC human zcytor 10 heterodimer is constructed. In this construct the  
CC extracellular cytokine binding domain of zcytor 10 is fused to the heavy  
CC chain of IgG gamma and the extracellular portion of the the heteromeric  
CC cytokine receptor subunit (an interleukin receptor subunit) is fused to  
CC human kappa light chain (See GENESEQ record AAA54474). The two sequences  
CC are fused together using two primers (AAA54475, AAA54476)  
XX  
SQ Sequence 330 AA;  
Query Match 100.0%; Score 1263; DB 4; Length 330;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 99 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 158  
QY 61 NWYVDGVEVHNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 159 NWYVDGVEVHNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPSDIAVEVESNGQPENNYKTTTP 180  
Db 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPSDIAVEVESNGQPENNYKTTTP 278  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
Db 279 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 330

RESULT 26  
 AAM47856  
 ID AAM47856 standard; protein; 330 AA.  
 XX  
 XX AAM47856;  
 AC  
 XX  
 XX 22-FEB-2002 (first entry)  
 DT  
 XX  
 XX Human Ig-gammal heavy chain constant region amino acid sequence.  
 DE  
 XX  
 XX Human; immunoadhesin; intercellular adhesion molecule; ICAM-1;  
 KW human rhinovirus; immunoglobulin heavy chain; J chain; HRV; common cold;  
 KW transgenic plant.  
 XX  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO200183529-A2.  
 FN  
 XX  
 XX 08-NOV-2001.  
 PD  
 XX  
 XX 26-APR-2001; 2001WO-US013932.  
 PF  
 XX  
 XX 28-APR-2000; 2000US-0200298P.  
 PR  
 XX  
 XX (PLAN-) PLANET BIOTECHNOLOGY INC.  
 PA  
 XX  
 XX Larrick JW, Wycoff KL;  
 PI WPI; 2002-041481/05.  
 XX  
 XX N-PSDB; ABA05265.  
 DR  
 XX  
 XX  
 XX Immunoadhesin for treating human rhinovirus infection comprises chimeric  
 PT intercellular adhesion molecule-1, and optionally a J chain and secretory  
 PT component in association.  
 PT  
 XX  
 XX Disclosure; Fig 7; 138pp; English.  
 PS  
 XX  
 XX The invention relates to an immunoadhesin comprising: (a) a chimeric  
 CC intercellular adhesion molecule (ICAM)-1 comprising a rhinovirus receptor  
 CC protein linked to at least a portion of an immunoglobulin heavy chain;  
 CC and (b) optionally a J chain and secretory component associated with the  
 CC chimeric ICAM-1 molecule. The immunoadhesin has plant-specific  
 CC glycosylation and virucide activity. The immunoadhesin is useful for  
 CC reducing infection by human rhinovirus (HRV) and hence the initiation or  
 CC spread of the common cold by HRV. The immunoadhesin binds to HRV and  
 CC reduces its infectivity, competing with cell surface ICAM-1 for binding  
 CC sites, interfering with virus entry or coating and directing premature  
 CC release of viral RNA and formation of empty capsids. Expression of the  
 CC immunoadhesin in plants would be tetrameric, rather than dimeric.  
 CC Immunoadhesin having multiple binding sites have a higher effective  
 CC affinity for the virus, thereby increasing the effectiveness of the  
 CC immunoadhesin. Association of secretory component and immunoglobulin J  
 CC chain increases the stability of the immunoadhesin in the mucosal  
 CC environment. Production is significantly less expensive in plants than in  
 CC animal cell culture and production in plants is safer for human use,  
 CC since plants are not known to harbor any animal viruses. The present  
 CC sequence is that of a human immunoglobulin protein sequence, useful to  
 CC the invention  
 XX  
 XX  
 SQ Sequence 330 AA;  
 Query Match 100.0%; Score 1263; DB 5; Length 330;  
 Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPCPAPELGGPSVFLPPPKDITLMSRTEVTCVVVDVSHEDPEVKF 60  
 DB 99 EPKSCDKTHCTCPCPAPELGGPSVFLPPPKDITLMSRTEVTCVVVDVSHEDPEVKF 158  
 QY 61 NWYVDGVEVHNAKTPREBQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 |||||

DB 159 NWYVDGVEVHNAKTPREBQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218  
 QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTP 180  
 DB 219 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTP 278  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSVCSVMHEALHNHYTQKSLSLSPGK 232  
 DB 279 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSVCSVMHEALHNHYTQKSLSLSPGK 330  
 RESULT 27  
 AAE21960  
 ID AAE21960 standard; protein; 330 AA.  
 XX  
 XX AAE21960;  
 AC  
 XX  
 XX 25-JUL-2002 (first entry)  
 DT  
 XX  
 XX Human death domain containing receptor (DR6) protein-related protein.  
 DE  
 XX  
 XX Human; therapy; death domain containing receptor; DR6; receptor; anaemia;  
 KW apoptosis; rheumatoid arthritis; eczema; asthma; psoriasis; pancreatitis;  
 KW diabetes; cancer; multiple sclerosis; Graves disease; glomerulonephritis;  
 KW transplant rejection; systemic lupus erythematosus; hepatitis; cirrhosis;  
 KW autoimmune; gastritis; dermatosis; cardiopathy; infertility; haemostatic;  
 KW H. pylori-associated ulceration; antiinflammatory; vasotropic; virucide;  
 KW acquired immunodeficiency syndrome; AIDS; human immunodeficiency virus;  
 KW HIV; haemolytic uraemic syndrome; HUS; immunodeficiency; neuroprotective;  
 KW adult respiratory distress syndrome; ARDS; cytostatic; thymomimetic;  
 KW dermatological; hepatotropic; antibacterial.  
 XX  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO200185209-A2.  
 FN  
 XX  
 XX 15-NOV-2001.  
 PD  
 XX  
 XX 30-APR-2001; 2001WO-US011735.  
 PF  
 XX  
 XX 10-MAY-2000; 2000US-0203015P.  
 PR  
 XX  
 XX (ELIL) LILLY & CO ELI.  
 PA  
 XX  
 XX Heuer JG, Liu J, Na S, Song HV, Yang D;  
 DR WPI; 2002-351283/38.  
 XX  
 XX Treating or preventing T cell or Th2 cell mediated condition e.g., asthma  
 PT or multiple sclerosis in mammal, comprises administering composition  
 PT comprising death domain containing receptor, DR6 agonist or antagonist.  
 XX  
 XX Disclosure; Page 132-133; 133pp; English.  
 PS  
 XX  
 XX The invention relates to a method for treating or preventing a T cell  
 CC mediated condition or a Th2 cell mediated condition in a mammal. The  
 CC method comprising administering to the mammal a pharmaceutical  
 CC composition comprising a death domain containing receptor (DR6) agonist  
 CC or antagonist. The method is useful for treating or preventing a T cell  
 CC mediated condition or a Th2 cell mediated condition in a mammal. A DR6  
 CC agonist is useful in the manufacture of a medicament for treating or  
 CC preventing at least one symptom associated with aberrant apoptosis, graft  
 CC -versus-host disease (GVHD), rheumatoid arthritis, eczema, asthma, atopy,  
 CC inflammatory bowel disease, vasculitis, psoriasis, pancreatitis, insulin-  
 CC dependent diabetes mellitus, cancer, multiple sclerosis, Hashimoto's  
 CC thyroiditis, Graves disease, transplant rejection, systemic lupus  
 CC erythematosus, autoimmune dermatosis, autoimmune cardiopathy, autoimmune  
 CC infertility, Behcet's disease, autoimmune gastritis, fibrosing lung  
 CC disease, organ rejection after transplantation, thrombotic  
 CC thrombocytopenic purpura (TTP), chronic glomerulonephritis, haemolytic  
 CC uraemic syndrome (HUS), aplastic anaemia, myelodysplasia, multiple organ  
 CC dysfunction syndrome (MODS), adult respiratory distress syndrome (ARDS)  
 CC or a condition or symptom related to the above mentioned diseases in a

CC mammal. An DR6 antagonist is useful in the manufacture of a medicament  
CC for treating or preventing at least one symptom associated with  
CC immunodeficiency, aberrant apoptosis, bacterial, viral or microbial  
CC infection, complications of infection, human immunodeficiency virus  
CC (HIV), HIV-induced lymphoma, HIV-induced acquired immunodeficiency  
CC syndrome (AIDS), fulminant viral hepatitis B, fulminant viral hepatitis  
CC C, autoimmune hepatitis, chronic hepatitis, chronic cirrhosis, H. pylori  
CC associated ulceration, cytoprotection during cancer treatment,  
CC recuperation from chemotherapy, recuperation from irradiation therapy, or  
CC a condition or symptom related to the above mentioned diseases in a  
CC mammal. The present sequence is human DR6 protein-related protein  
XX  
SQ Sequence 330 AA;

Query Match 100.0%; Score 1263; DB 5; Length 330;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCCPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 99 EPKSCDKTHTCCPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 158

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 159 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180  
DB 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 278

QY 181 PVLDSGSGFFLYSKLTVDKSRWQOGNVSFCSVMHEALHNHYTQKSLSLSPGK 232  
DB 279 PVLDSGSGFFLYSKLTVDKSRWQOGNVSFCSVMHEALHNHYTQKSLSLSPGK 330

RESULT 28  
ABB81641  
ID ABB81641 standard; protein; 330 AA.  
AC ABB81641;  
XX  
DT 25-SEP-2002 (first entry)  
XX  
DE Human Igg gamma 1 heavy chain SEQ ID NO:15.  
XX  
KW Human; zcytor19; cytokine receptor; immunosuppressive; cytostatic;  
KW antirheumatic; antiarthritic; neuroprotective; anti-inflammatory;  
KW antidiabetic; nephrotropic; dermatological; anti-HIV; haemostatic;  
KW vaccine; immune system; T-cell specific leukaemia; lymphoma; lupus;  
KW autoimmune disease; rheumatoid arthritis; multiple sclerosis; HIV;  
KW diabetes mellitus; inflammatory bowel disease; Crohn's disease; asthma;  
KW immunologic renal disease; glomerulonephritis; vasculitis; polyarteritis;  
KW mesangioproliferative disease; chronic lymphocytic leukaemia; bronchitis;  
KW secondary glomerulonephritis; scleroderma; amyloidosis; multiple myeloma;  
KW haemolytic uraemic syndrome; renal neoplasia; urological neoplasia;  
KW emphysema; chronic airway disease.  
XX  
OS Homo sapiens.  
XX  
XX WO200244209-A2.  
XX  
PD 06-JUN-2002.  
XX  
XX 28-NOV-2001; 2001WO-US044808.  
XX  
XX 28-NOV-2000; 2000US-0253561P.  
PR 07-FEB-2001; 2001US-0267211P.  
XX  
XX (ZYMO ) ZYMOGENETICS INC.  
XX  
XX Presnell SR, Xu W, Novak JE, Whitmore TE, Grant FJ;  
XX WPI; 2002-527700/56.  
XX  
XX

DR N-PSDB; ABQ73076.  
XX  
XX Novel Zcytor19 polypeptides and polynucleotides useful for stimulating  
PT immune responses in animals for producing antibodies, and for treating  
PT autoimmune diseases, leukemia and asthma.  
XX  
XX Example 7; Page 171-172; 200pp; English.  
PS  
XX The present invention describes an isolated human zcytor19 protein (I),  
CC and truncated zcytor19 proteins. (I) has immunosuppressive, cytostatic,  
CC antirheumatic, antiarthritic, neuroprotective, anti-inflammatory,  
CC antidiabetic, nephrotropic, dermatological, anti-HIV and haemostatic.  
CC activities, and can be used in vaccines. (I) or an antibody binding (I)  
CC can be used for suppressing the immune system for reducing rejection of  
CC tissue or organ transplants and grafts and for treating T-cell specific  
CC leukemias or lymphomas and autoimmune diseases including rheumatoid  
CC arthritis, multiple sclerosis, diabetes mellitus, inflammatory bowel  
CC disease and Crohn's disease. The antibodies can also be used for treating  
CC immunologic renal diseases, glomerulonephritis, mesangioproliferative  
CC disease, chronic lymphocytic leukaemia, secondary glomerulonephritis or  
CC vasculitis associated with lupus, polyarteritis, scleroderma, HIV-related  
CC diseases, amyloidosis and haemolytic uraemic syndrome. (I) and the  
CC antibodies can also be used for renal or urological neoplasms and  
CC multiple myelomas, asthma, bronchitis, emphysema and other chronic airway  
CC diseases. Human zcytor19 is located to chromosome 1, more specifically to  
CC chromosome 1p36.11. The present sequence represents a human Igg gamma 1  
CC heavy chain protein, which is used in an example from the present  
XX invention  
XX  
SQ Sequence 330 AA;

Query Match 100.0%; Score 1263; DB 5; Length 330;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCCPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 99 EPKSCDKTHTCCPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 158

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 159 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180  
DB 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 278

QY 181 PVLDSGSGFFLYSKLTVDKSRWQOGNVSFCSVMHEALHNHYTQKSLSLSPGK 232  
DB 279 PVLDSGSGFFLYSKLTVDKSRWQOGNVSFCSVMHEALHNHYTQKSLSLSPGK 330

RESULT 29  
ABB05736  
ID ABB05736 standard; protein; 330 AA.  
XX  
XX ABB05736;  
XX  
XX 01-MAY-2002 (first entry)  
DT  
XX  
DE Human immunoglobulin G gamma 1 protein sequence SEQ ID NO:38.  
XX  
XX Zcytor17; chromosome 5; 5q11; cytokine receptor; immunomodulatory;  
KW antinflammatory; antiviral; antirheumatic; antiarthritic; cytostatic;  
KW muscular; lymphoid; immune; inflammatory; splenic; blood; bone;  
KW infection; immunosuppression; cytotoxicity; leukopenia; Crohn's disease;  
KW autoimmune disease; rheumatoid arthritis; multiple sclerosis; cancer;  
KW inflammatory disease; pancreatitis; inflammatory bowel disease.  
XX  
XX Homo sapiens.  
XX  
XX WO200200721-A2.  
XX

PD 03-JAN-2002.  
XX  
PF  
XX  
XX  
PR 26-JUN-2001; 2001WO-US020484.  
PR 26-JUN-2000; 2000US-0214282P.  
PR 29-JUN-2000; 2000US-0214955P.  
PR 08-FEB-2001; 2001US-0267963P.  
XX  
XX  
PA (ZYMO ) ZYMOGENETICS INC.  
XX  
XX  
PI Srecher CA, Presnell SR, Gao Z, Whitmore TE, Kuijper JL;  
PI Maurer MF;  
XX  
XX  
DR WPI; 2002-090519/12.  
DR N-PSDB; ABA93797.  
XX  
XX  
PT Isolated polynucleotide encoding a cytokine receptor zcytor17 which is  
PT useful for treating and diagnosing lymphoid, immune, inflammatory,  
PT splenic, blood or bone disorders.  
XX  
XX  
PS Example 17; Page 187-188; 235pp; English.  
XX  
XX  
CC The present invention describes a cytokine receptor designated zcytor17.  
CC Zcytor17 has immunomodulatory, antiinflammatory, antiviral, cytostatic,  
CC antirheumatic, antiarthritic and muscular activities. The zcytor17  
CC proteins are useful for treating and diagnosing lymphoid, immune,  
CC inflammatory, splenic, blood or bone disorders. Agonists or anti-  
CC zcytor17 antibodies are useful in stimulating cell-mediated immunity and  
CC for stimulating lymphocyte proliferation, such as in the treatment of  
CC infections involving immunosuppression, including certain viral  
CC infections. They are also useful for inducing cytotoxicity and for  
CC treating leukopneias. Antagonist of zcytor17 polypeptides are useful for  
CC treating autoimmune diseases (e.g. rheumatoid arthritis and multiple  
CC sclerosis), inflammatory diseases (e.g. Crohn's disease), cancer,  
CC pancreatitis, and inflammatory bowel disease. Zcytor17 was mapped to  
CC chromosome 5, specifically to the 5q11 chromosomal region. ABA93767 to  
CC ABA93843 and ABB05730 to ABB05745 represent sequences used in the  
CC exemplification of the present invention  
XX  
SQ Sequence 330 AA;  
  
Query Match 100.0%; Score 1263; DB 5; Length 330;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db |||||  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db |||||  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
Db |||||  
QY 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 278  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQOGNVPFSCVWHEALHNNHYTKSLSLSPGK 232  
Db |||||  
Db 279 PVLDSGSGFFLYSKLTVDKSRWQOGNVPFSCVWHEALHNNHYTKSLSLSPGK 330  
  
RESULT 30  
ID ABA9371856  
XX  
XX AC ABA9371856;  
XX  
XX  
DT 17-APR-2003 (first entry)  
XX  
XX Human IgG1 Fc gamma region.  
XX  
XX Human; fusion protein; IgE Fc epsilon; IgG Fc gamma; Fc epsilonRI; allergy;

KW Fc epsilonRII; Fc gammaRIIb; protein therapy; IgE; IgG; asthma; hay fever;  
KW allergic asthma; allergic rhinitis; hay fever; food allergy;  
KW atopic dermatitis; drug allergy; peanut allergen.  
XX  
OS Homo sapiens.  
XX  
XX  
FH Key  
FH Region  
FT  
FT Location/Qualifiers  
FT 1..98  
FT /label= CH1 region  
FT 99..113  
FT /label= Hinge region  
FT 114..223  
FT /label= CH2 region  
FT 224..330  
FT /label= CH3 region  
XX  
XX  
FN WO20021023320-A2.  
XX  
XX  
PD 27-DEC-2002.  
XX  
XX  
PF 14-JUN-2002; 2002WO-US019448.  
XX  
XX  
PR 15-JUN-2001; 2001US-0298710P.  
XX  
XX (TANO-) TANOX INC.  
XX  
XX An L, Wu H, Fung MSC;  
XX  
XX WPI; 2003-167440/16.  
XX  
XX New fusion protein which binds to Fc epsilonRI or RII receptor and  
XX Fc gammaRIIb receptor, useful for treating or preventing allergies and  
XX asthma, comprises an IgE Fc epsilon fragment and an IgG Fc gamma fragment.  
PS Disclosure; Fig 5; 32pp; English.  
XX  
XX The invention relates to a novel fusion protein comprising an IgE  
XX Fc epsilon fragment and an IgG Fc gamma fragment, which binds to an  
XX Fc epsilonRI and/or Fc epsilonRII receptor and an Fc gammaRIIb receptor. The  
XX fusion protein of the invention may have a use in protein therapy. The  
XX fusion protein is useful in treating or preventing IgE-mediated allergies  
XX and asthma, such as allergic asthma, allergic rhinitis, hay fever, food  
XX allergy, atopic dermatitis and drug allergy. The allergic response is  
XX particularly caused by peanut allergen. The present sequence represents  
XX the human IgG1 Fc gamma fragment  
XX  
SQ Sequence 330 AA;  
  
Query Match 100.0%; Score 1263; DB 6; Length 330;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db |||||  
QY 99 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db |||||  
QY 159 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
Db |||||  
QY 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 278  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQOGNVPFSCVWHEALHNNHYTKSLSLSPGK 232  
Db |||||  
Db 279 PVLDSGSGFFLYSKLTVDKSRWQOGNVPFSCVWHEALHNNHYTKSLSLSPGK 330  
  
RESULT 31  
ID ABA932915  
XX  
XX ABA932915 standard; protein; 330 AA.

AC AAE32915;  
XX  
XX DT 24-MAR-2003 (first entry)  
XX  
XX DE Human immunoglobulin G1 (IgG1) heavy chain Fc region.  
XX  
XX KW Human immunoglobulin G1; IgG1.  
XX  
XX T-cell; immunogenic; therapy; human; immunoglobulin G1; IgG1.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO200279232-A2.  
XX  
XX PD 10-OCT-2002.  
XX  
XX PF 30-MAR-2002; 2002WO-US009815.  
XX  
XX PR 30-MAR-2001; 2001US-0280625P.  
XX  
XX PA (LEXI-) LEXIGEN PHARM CORP.  
XX  
XX PI Gillies SD;  
XX  
XX DR WPI; 2003-103259/09.  
XX  
XX PT Reducing the immunogenicity of a fusion protein comprises changing an amino acid within the junction region to reduce the ability of the candidate T-cell epitope identified within the junction spanning to interact with T-cell receptor.  
XX  
XX PS Disclosure; Page 49-50; 68pp; English.  
XX  
XX CC The invention relates to a method for reducing the immunogenicity of a fusion protein which involves identifying a candidate T-cell epitope within a junction spanning a fusion junction of a fusion protein, and changing an amino acid within the junction region to reduce the ability of the candidate T-cell epitope to interact with a T-cell receptor. The method is useful for reducing the immunogenicity of a fusion protein. It is useful for analysing, changing or modifying one or more amino acids in the junction region of a fusion protein to identify a T-cell epitope and reduce its ability to interact with a T-cell receptor. The less immunogenic fusion proteins are useful in providing therapeutic treatment. The present sequence is human immunoglobulin G1 (IgG1) heavy chain Fc region used to illustrate the method of the invention  
XX  
SQ Sequence 330 AA;  
  
Query Match 100.0%; Score 1263; DB 6; Length 330;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 99 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 158  
  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
Db 159 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 218  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTP 180  
Db 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTP 278  
  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVVMEALHNHYTOKSLSLSPGK 232  
Db 279 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVVMEALHNHYTOKSLSLSPGK 330  
  
RESULT 32  
AAE32627  
ID AAE32627 standard; protein; 330 AA.  
XX  
AC AAE32627;  
XX

DT 24-MAR-2003 (first entry)  
XX  
XX DE Human immunoglobulin G1 (IgG1) heavy chain Fc region.  
XX  
XX KW Human; immunogenic; therapy; immunoglobulin G1; IgG1.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO200279415-A2.  
XX  
XX PD 10-OCT-2002.  
XX  
XX PF 29-MAR-2002; 2002WO-US009650.  
XX  
XX PR 30-MAR-2001; 2001US-0280625P.  
XX  
XX PA (LEXI-) LEXIGEN PHARM CORP.  
XX  
XX PI Gillies SD;  
XX  
XX DR WPI; 2003-111794/10.  
XX  
XX PT Reducing the immunogenicity of a fusion protein by changing an amino acid within the junction region spanning a fusion junction of a fusion protein to reduce the ability of the candidate T-cell epitope to interact with a T-cell receptor.  
XX  
XX PS Disclosure; Page 49-50; 67pp; English.  
XX  
XX CC The present invention relates to a method of reducing the immunogenicity of a fusion protein. The method involves identifying a candidate T-cell epitope within a junction region spanning a fusion junction of a fusion protein and changing an amino acid within the junction region to reduce the ability of the candidate T-cell epitope to interact with a T-cell receptor. The method is useful for reducing the immunogenicity of fusion proteins for use in therapy. The present sequence is human immunoglobulin G1 (IgG1) heavy chain Fc region. This sequence is used to illustrate the method of the invention  
XX  
SQ Sequence 330 AA;  
  
Query Match 100.0%; Score 1263; DB 6; Length 330;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 99 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 158  
  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
Db 159 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 218  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTP 180  
Db 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTP 278  
  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVVMEALHNHYTOKSLSLSPGK 232  
Db 279 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVVMEALHNHYTOKSLSLSPGK 330  
  
RESULT 33  
ABR82103  
ID ABR82103 standard; protein; 330 AA.  
XX  
AC ABR82103;  
XX  
XX DT 23-SEP-2003 (first entry)  
XX  
XX DE Human DR6 related amino acid sequence SEQ ID NO:5.  
XX  
XX KW Human; DR6; B-cell mediated disease; immunosuppressive; antirheumatic;

KW antiarthritic; antiasthmatic; dermatological; antiinflammatory;  
KW antipsoriatic; antidiabetic; cytostatic; neuroprotective; thyromimetic;  
KW antithyroid; nephrotropic; antiinfertility; vasotropic; virucide;  
KW hepatotropic; antibacterial; antiulcer; haemostatic; antianaemic;  
KW antimicrobial; anti-HIV; DR6 agonist; DR6 antagonist; immunity.  
XX Homo sapiens.  
OS WO2003051290-A2.  
XX 26-JUN-2003.  
XX 10-DEC-2002; 2002WO-US037596.  
XX 17-DEC-2001; 2001US-0342632P.  
XX (ELIL ) LILLY & CO ELI.  
XX Liu J, Na S, Song HY, Yang D;  
XX WPI; 2003-541604/51.  
XX Treating or preventing a B cell mediated condition e.g., chronic  
PT hepatitis or chronic cirrhosis, in a mammal by administering a  
PT pharmaceutical composition comprising a DR6 agonist or DR6 antagonist to  
PT the mammal.  
XX Disclosure; Page 96-97; 97pp; English.  
XX The present invention describes a method (M1) for treating or preventing  
CC a B cell mediated condition in a mammal by administering a pharmaceutical  
CC composition comprising a DR6 agonist or DR6 antagonist to the mammal.  
CC Also described: (1) inhibiting B cell mediated immunity in a mammal, by  
CC administering a pharmaceutical composition comprising at least one DR6  
CC agonist; (2) use of a DR6 agonist in the manufacture of a medicament for  
CC treating or preventing at least one symptom associated with conditions  
CC (C1) such as aberrant apoptosis, graft-versus-host disease (GVHD), atopy,  
CC rheumatoid arthritis, asthma, eczema, inflammatory bowel disease, cancer,  
CC vasculitis, psoriasis, insulin-dependent diabetes mellitus, pancreatitis,  
CC psoriasis, multiple sclerosis, Hashimoto's thyroiditis, Graves' disease,  
CC transplant rejection, systemic lupus erythematosus, Behcet's disease,  
CC autoimmune nephropathy, autoimmune haematopathy, idiopathic interstitial  
CC pneumonia, hypersensitivity pneumonitis, autoimmune dermatosis,  
CC autoimmune cardiopathy, autoimmune infertility, autoimmune gastritis,  
CC fibrosing lung disease, fulminant viral hepatitis B, fulminant viral  
CC hepatitis C, autoimmune hepatitis, chronic hepatitis, chronic cirrhosis,  
CC Helicobacter pylori-associated ulceration, organ rejection after  
CC transplantation, chronic glomerulonephritis, thrombotic thrombocytopenic  
CC purpura (TTP) and haemolytic uraemic syndrome (HUS), aplastic anaemia,  
CC myelodysplasia, multiple organ dysfunction syndrome (MDS), adult  
CC respiratory distress syndrome (ARDS), and at least one condition or  
CC symptom related to the conditions, in a mammal; and (3) use of DR6  
CC antagonist in the manufacture of a medicament for treating or preventing  
CC at least one symptom associated with conditions (C2) such as aberrant  
CC apoptosis, immunodeficiency, bacterial infection, viral infection,  
CC microbial infection, complications of infection, HIV, HIV-induced  
CC lymphoma, HIV-induced AIDS, fulminant viral hepatitis B, fulminant viral  
CC hepatitis C, autoimmune hepatitis, chronic hepatitis, chronic cirrhosis,  
CC H. pylori-associated ulceration, cytoprotection during cancer treatment,  
CC recuperation from chemotherapy, recuperation from irradiation therapy,  
CC and at least one condition or symptom related to the conditions, in a  
CC mammal. DR6 has immunosuppressive, antiinflammatory, antiarthritic,  
CC antiasthmatic, dermatological, antiinflammatory, antipsoriatic,  
CC antidiabetic, cytostatic, neuroprotective, thyromimetic, antithyroid,  
CC nephrotropic, antiinfertility, vasotropic, virucide, hepatotropic,  
CC antibacterial, antiulcer, haemostatic, antianaemic, antimicrobial and  
CC anti-HIV activities. (M1) is useful for treating or preventing at least  
CC one symptom associated with (C1) in a mammal, preferably human, by  
CC administering DR6 agonist, and for treating or preventing at least one  
CC symptom associated with (C2) by administering DR6 antagonist. The present  
CC sequence represents a human DR6 related amino acid sequence, which is  
CC given in the exemplification of the present invention

SQ Sequence 330 AA;  
Query Match 100.0%; Score 1263; DB 6; Length 330;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPAPPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 99 EPKSCDKTHTCPPAPPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158  
QY 61 NMVVDGVEVHNAKTPRERQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 159 NMVVDGVEVHNAKTPRERQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLIVKGFPYPSDI AVEWESNGQPENNYKTTTP 180  
DB 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLIVKGFPYPSDI AVEWESNGQPENNYKTTTP 278  
QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSVHMEALHNHYTQKSI LSLSPGK 232  
DB 279 PVLDSGSPFLYSKLTVDKSRWQGNVFCSVHMEALHNHYTQKSI LSLSPGK 330  
RESULT 34  
AAO31102  
ID AAO31102 standard; protein; 330 AA.  
XX AAO31102;  
XX  
XX 06-OCT-2003 (first entry)  
XX Human A2-G8 SCF antibody heavy chain constant region.  
XX Human; antibody; stem cell factor; mast cell growth factor; asthma; SCF;  
KW steel factor; c-kit ligand; gene therapy; heavy chain.  
XX Homo sapiens.  
XX WO2003051311-A2.  
XX 26-JUN-2003.  
XX 16-DEC-2002; 2002WO-US040227.  
XX 17-DEC-2001; 2001US-0342174P.  
XX (FARB ) BAYER CORP.  
XX Takeuchi T, Tomkinson A, Neben S;  
XX WPI; 2003-523500/49.  
XX N-PSDB; AAL62618.  
XX New purified human antibody that binds to stem cell factor protein,  
XX useful for preparing a composition for treating asthma.  
XX Example 10; Page 47-48; 94pp; English.  
XX The invention provides human antibodies that bind to stem cell factor  
XX (SCF) protein. SCF is also known as mast cell growth factor, steel factor  
XX or c-kit ligand. Antibodies of the invention are useful for preparing  
XX compositions for treating asthma. They are also used in gene therapy. The  
XX present sequence is human SCF antibody heavy chain constant region  
SQ Sequence 330 AA;  
Query Match 100.0%; Score 1263; DB 6; Length 330;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPAPPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 99 EPKSCDKTHTCPPAPPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

QY 61 NNYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGKEYCKVSNKALPAPIEKT 120  
 |||||  
 Db 159 NNYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGKEYCKVSNKALPAPIEKT 218  
 |||||  
 QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 |||||  
 Db 219 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 278  
 |||||  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKLSLSPGK 232  
 |||||  
 Db 279 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKLSLSPGK 330  
 |||||

RESULT 35  
 ABR55836  
 ID ABR55836 standard; protein; 330 AA.  
 XX  
 AC ABR55836;  
 XX  
 DT 02-SEP-2003 (first entry)  
 XX  
 DE Anti-Ang-2 antibody IgG1 constant region.  
 XX

KW Ang-2; angiopoietin-2; anorectic; cytostatic; antiarteriosclerotic;  
 KW gynaecological; antiinflammatory; osteopathic; antipsoriatic; cancer;  
 KW angiogenesis; antibody; human.  
 XX

OS Homo sapiens.  
 XX

PN WO2003030833-A2.  
 XX

PD 17-APR-2003.  
 XX

PF 11-OCT-2002; 2002WO-US032613.  
 XX

PR 11-OCT-2001; 2001US-0328604P.  
 XX

PR 10-OCT-2002; 2002US-00269805.  
 XX

PA (AMGE-) AMGEN INC.  
 XX

PI Oliner JD;  
 XX

DR WPI; 2003-504963/47.  
 XX

PT New specific binding agents (i.e. anti-Angiopoietin-2 antibodies), useful  
 PT for inhibiting undesired angiogenesis, or treating e.g. cancers, obesity,  
 PT hemangioma, arteriosclerosis, atherosclerosis or endometriosis.  
 XX

PS Example 4; Page 96; 161pp; English.  
 XX

CC The invention relates to a specific binding agent, which comprises at  
 CC least one peptide selected from any of 62 peptides (ABR55769-830) or its  
 CC fragment. The binding agents are antibodies that recognize and bind to  
 CC angiopoietin-2 (Ang-2). The specific binding agent, particularly the  
 CC antibody, is useful for inhibiting undesired angiogenesis, treating  
 CC cancers, inhibiting undesired angiogenesis, modulating or inhibiting Ang-  
 CC 2 activity, modulating vascular permeability or plasma leakage, or  
 CC treating a disease (e.g. ocular neovascular disease, obesity,  
 CC haemangioblastoma, haemangioma, arteriosclerosis, inflammatory disease,  
 CC inflammatory disorders, atherosclerosis, endometriosis, neoplastic  
 CC disease, bone-related disease, or psoriasis) in a mammal. The present  
 CC sequence represents a human IgG1 constant region of an anti-Ang-2  
 CC antibody  
 XX

SQ Sequence 330 AA;  
 XX

Query Match 100.0%; Score 1263; DB 6; Length 330;  
 Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
 |||||

Db 99 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 158  
 |||||  
 QY 61 NNYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGKEYCKVSNKALPAPIEKT 120  
 |||||  
 Db 159 NNYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGKEYCKVSNKALPAPIEKT 218  
 |||||  
 QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 |||||  
 Db 219 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 278  
 |||||  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKLSLSPGK 232  
 |||||  
 Db 279 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKLSLSPGK 330  
 |||||

RESULT 36  
 AAO30893  
 ID AAO30893 standard; protein; 330 AA.  
 XX

AC AAO30893;  
 XX

DT 22-SEP-2003 (first entry)  
 XX

DE Human immunoglobulin gamma (IgG) 1 constant region.  
 XX

KW Cytokine; interleukin-2; IL-2; cancer; viral infection; immune disorder;  
 KW gene therapy; immunoglobulin; Ig; human.  
 XX

OS Homo sapiens.  
 XX

PN WO2003048334-A2.  
 XX

PD 12-JUN-2003.  
 XX

PF 04-DEC-2002; 2002WO-US038780.  
 XX

PR 04-DEC-2001; 2001US-0337113P.  
 XX

PR 12-APR-2002; 2002US-0371966P.  
 XX

PA (EMDL-) EMD LEXIGEN RES CENT CORP.  
 XX

PI Gillies SD;  
 XX

DR WPI; 2003-513757/48.  
 XX

PT New fusion protein comprising a non-IL-2 moiety fused to a mutant IL-2  
 PT moiety, useful for preparing a composition for treating cancer, viral  
 PT infections or immune disorders.  
 XX

PS Example 1; Page 51-53; 71pp; English.  
 XX

CC The invention relates to cytokine fusion proteins with increased  
 CC therapeutic index and methods for increasing the therapeutic index of  
 CC such fusion proteins. The fusion protein comprises a non-interleukin-2  
 CC (IL-2) moiety fused to a mutant IL-2 moiety. It is useful for preparing a  
 CC composition for treating cancer, viral infections or immune disorders.  
 CC The fusion protein is also used in gene therapy. The present sequence is  
 CC human immunoglobulin gamma (IgG) constant region. This sequence is used  
 CC to illustrate the method of the invention  
 XX

SQ Sequence 330 AA;  
 XX

Query Match 100.0%; Score 1263; DB 6; Length 330;  
 Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
 |||||

Db 99 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 158  
 |||||

QY 61 NNYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGKEYCKVSNKALPAPIEKT 120  
 |||||

Db 159 NNYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGKEYCKVSNKALPAPIEKT 218  
 |||||

Qy	61	NWYVDGVEVHNAKTPREEQNSYRVVSVLTVLHQDWLNKGEYKCKYSNKPAPIEKT	120
Dd	159	NWYVDGVEVHNAKTPREEQNSYRVVSVLTVLHQDWLNKGEYKCKYSNKPAPIEKT	218
Qy	121	ISKAGQPREPQVTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPT	180
Dd	219	ISKAGQPREPQVTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPT	278
Qy	181	PVLDSDSGSFFLYSKLTVDKSRWQQGNFPCSMVEALHNNHYTKQSLSISPGK	232
Dd	279	PVLDSDSGSFFLYSKLTVDKSRWQQGNFPCSMVEALHNNHYTKQSLSISPGK	330

RESULT 38	
ADE97351	
ID - ADE97351 standard; protein; 330 AA.	
XX	
XX	
AC	
AC ADE97351;	
XX	
XX	
DT 12-FEB-2004 (first entry)	
XX	
XX	
DE	
DE Human IgG1 heavy chain constant region protein - SEQ ID 20.	
XX	
XX	
KW immunoadhesin; immunoglobulin heavy chain; J chain; joining; toxin;	
KW virucide; antibacterial; anthrax; rhinovirus infection; common cold;	
KW intercellular adhesion molecule; ICAM-1; human; constant region; IgG.	

XX New immunoadhesin, useful for treating anthrax and rhinovirus, comprises  
PT chimeric toxin receptor protein linked to immunoglobulin heavy chain, and  
PT J chain and secretory component associated with the chimeric toxin  
PT receptor protein.  
XX  
PS Disclosure; SEQ ID NO 20; 288pp; English.  
XX  
CC The invention relates to a novel immunoadhesin comprising a chimeric  
CC toxin receptor protein consisting of a toxin receptor protein linked to  
CC at least a portion of an immunoglobulin heavy chain with a J (joining)  
CC chain and secretory component (SC) associated with the chimeric toxin  
CC receptor protein. The immunoadhesin comprises a chimeric bacterial or  
CC viral toxin receptor protein and the immunoadhesin has plant-specific  
CC glycosylation. The immunoadhesin of the invention demonstrates virucide  
CC and antibacterial activities and may be useful for reducing the binding or  
CC of a viral or bacterial antigen to a host cell and thus for treating or  
CC preventing anthrax, as well as human rhinovirus infection which results  
CC in the common cold. The current sequence is that of the human  
CC immunoadhesin-related protein of the invention.

CC preventing anthrax, as well as human rhinovirus infection which results  
CC in the common cold. The current sequence is that of the human  
CC immunoadhesion-related protein of the invention.  
XX  
SQ Sequence 330 AA;

Query Match	100.0%;	Score 1263;	DB 7;	Length 330;
Best Local Similarity	100.0%;	Pred. No. 2.3e-91;		
Matches 232;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDDEVKF 60  
Db 99 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDDEVKF 158  
QY 61 NWVVDGVEVHNATKPREEOYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 159 NWVVDGVEVHNATKPREEOYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218  
QY 121 ISKAKQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 219 ISKAKQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 278  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
Db 279 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 330

RESULT 39

ADF83605  
ID ADF83605 standard; protein; 330 AA.

XX AC ADF83605;

XX DT 26-FEB-2004 (first entry)

XX DE Cytokine receptor related human Zcytor19 protein, SEQ ID No 15.

XX KW soluble cytokine receptor; virucide; cytostatic; immunosuppressive;  
KW antiarthritic; neuroprotective; antidiabetic;  
KW nephrotropic; antiinflammatory; viral infection; cancer;  
KW autoimmune disease; ligand blocking; human.

XX OS Homo sapiens.

XX WO2003089603-A2.

XX PD 30-OCT-2003.

XX PF 18-APR-2003; 2003WO-US012030.

XX PR 19-APR-2002; 2002US-0373813P.

XX PA (ZYMO ) ZYMOGENETICS INC.

XX PI Presnell SR, Xu W, Novak JE, Whitmore TE, Grant FJ;

XX PI Kindsvogel WR, Klucher KW;

XX DR WPI; 2003-854110/79.

XX DR N-PSDB; ADF83604.

XX PT New Zcytor19 receptor polypeptides and polynucleotides, useful for  
PT detecting and treating viral infections, cancer or autoimmune diseases  
PT (e.g. rheumatoid arthritis, multiple sclerosis, diabetes or  
PT glomerulonephritis).

XX PS Example 7; SEQ ID NO 15; 186pp; English.

XX CC The invention relates to a novel isolated polynucleotide that encodes a  
CC soluble cytokine receptor polypeptide. The encoded polypeptide comprises:  
CC a sequence of 211 amino acids fully defined in the specification, or a  
CC region from amino acid residues 21-163, 1-163, 21-211 or 1-211; or a  
CC sequence at least 90% identical to the 211 amino acids. The cytokine  
CC polynucleotides and polypeptides have the following activities: virucide,  
CC cytostatic, immunosuppressive, antiarthritic, antiinflammatory,  
CC neuroprotective, antidiabetic, nephrotropic, and antiinflammatory. The  
CC composition and methods are useful in detecting and treating viral  
CC infections, cancer or autoimmune diseases (e.g. rheumatoid arthritis,  
CC multiple sclerosis, diabetes, glomerulonephritis or inflammatory bowel  
CC diseases) in vitro and in vivo. The ligand-binding receptor polypeptides  
CC may also be used in blocking ligand activity in vitro and in vivo. This  
CC sequence represents a cytokine receptor related human protein of the  
CC invention.

SQ Sequence 330 AA;  
Query Match 100.0%; Score 1263; DB 7; Length 330;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDDEVKF 60  
Db 99 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDDEVKF 158  
QY 61 NWVVDGVEVHNATKPREEOYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 159 NWVVDGVEVHNATKPREEOYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218  
QY 121 ISKAKQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 219 ISKAKQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 278  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
Db 279 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 330

RESULT 40

ADF75001

ID ADF75001 standard; protein; 330 AA.

XX AC ADF75001;

XX DT 26-FEB-2004 (first entry)

XX DE Human Ig gamma-1 heavy chain constant region.

XX KW Human; fusion protein; epitope; major histocompatibility complex;

XX KW MHC type II; T-cell receptor; immunogenicity; glycosylation; cytokine;

XX KW hormone.

XX OS Homo sapiens.

XX PN US2003166877-A1.

XX PD 04-SEP-2003.

XX PF 29-MAR-2002; 2002US-00112582.

XX PR 30-MAR-2001; 2001US-0280625P.

XX PA (LEXI-) LEXIGEN PHARM CORP.

XX PI Gillies SD, Way J, Hamilton AA;

XX DR WPI; 2003-898110/82.

XX PT Reducing the immunogenicity of a fusion protein by identifying a  
PT candidate T-cell epitope within a junction region spanning a fusion  
PT protein and changing an amino acid within the junction region.

XX PS Disclosure; SEQ ID NO 1; 34pp; English.

XX CC The invention relates to reducing the immunogenicity of a fusion protein  
CC comprising: identifying a candidate T-cell epitope (binding to MHC class  
CC II (major histocompatibility complex)) within a junction region spanning  
CC a fusion protein and changing an amino acid within the junction region to  
CC reduce the ability of the candidate T-cell epitope to interact with a T-  
CC cell receptor. Also included are a method for reducing the immunogenicity  
CC of a fusion protein, a fusion protein with reduced immunogenicity and a  
CC nucleic acid encoding the fusion protein with reduced immunogenicity. The  
CC method also comprises introducing a glycosylation site within 5 or 2  
CC amino acids of the fusion junction. The first protein of the fusion  
CC protein comprises IgG1 or IgG2, having a C-terminal that is linked to the  
CC N-terminus of the second protein. The second protein comprises cytokine  
CC or hormone activity. The junction region comprises a spacer or linker. It  
CC comprises an Asn-X-Ser/Thr-Gly-amino acid sequence, where X is any amino



XX WPI; 2004-119700/12.  
 DR N-PSDB; ADM68909.  
 XX Screening ligands, by providing initial nucleic acid cassettes, modifying  
 PT cassette in single reaction mixture, introducing modified cassette into  
 PT mammalian cell, expressing modified cassette in transfected cells.  
 XX Disclosure; SEQ ID NO 6; 63pp; English.  
 XX  
 XX The invention relates to screening ligands, by providing several initial  
 CC nucleic acid cassettes, modifying each nucleic acid cassette in single  
 CC reaction mixture so that it is functional in a second expression system,  
 CC introducing each modified nucleic acid cassette into a mammalian cell to  
 CC produce a mixture of transfected cells, and expressing each modified  
 CC nucleic acid cassette in transfected cells. Also included are screening  
 CC nucleic acids (involving providing a number of first different nucleic  
 CC acids, each encoding a hetero oligomeric candidate ligand, selecting a  
 CC subset of a number of first different nucleic acids by contacting  
 CC candidate ligands encoded by the members of a number of first different  
 CC nucleic acids to a target, reformatting each nucleic acid of the subset  
 CC for mammalian cell expression, such that each nucleic acid encodes a  
 CC hetero-oligomeric protein that includes a first functional domain of one  
 CC subunit of the candidate ligand, a second functional domain of another  
 CC subunit of the candidate ligand and an effector domain not encoded by the  
 CC nucleic acids of a number of first different nucleic acids, introducing  
 CC members of the subset into a mammalian cell to form several expression  
 CC cells that can produce the protein that includes the functional domain  
 CC and the effector domain, and screening the expression cells to identify  
 CC cells that produce at least a threshold amount of a ligand-effector  
 CC domain fusion protein) and evaluating display library members (involving  
 CC providing several display library members, determining an assessment for  
 CC each library member with respect to a property, storing information about  
 CC the assessments of the library members in a computer database, filtering  
 CC the information to identify a subset of the library members, and  
 CC reformatting each member of the subset for expression in a mammalian cell  
 CC by a method that comprises disposing nucleic acid for each member of the  
 CC selected subset into a single container). The method is useful for  
 CC screening ligands. Bacterial and mammalian expression vectors  
 CC (reformatting vectors) were prepared that support the transfer  
 CC individually or en masse of Fab heavy and light chain genes from a  
 CC bacterial expression vector to a mammalian expression vector. Typically,  
 CC the display vector was a phagemid or phage display vector, which mediate  
 CC the expression of the Fab on the surface of the bacteriophage M13 or fd.  
 CC The Fab-encoding segment was transferred from the bacterial display  
 CC vector to the eukaryotic vector, e.g., pBRV or pRRV by restricting the  
 CC vector with ApaI and BstE2. This fragment was subcloned into ApaI/BstE2  
 CC sites of pBRV (batch reformatting vector) or pRRV (rapid reformatting  
 CC vector). This vector contained a CMV eukaryotic promoter in place of the  
 CC first bacterial leader sequence. The VH-CH1 sequence was no longer fused  
 CC to Gene III but was fused in-frame to a sequence encoding an  
 CC immunoglobulin Fc region, e.g., including Hinge-CH2-CH3. Two intervening  
 CC segments which were inserted between heavy and light chain coding  
 CC sequences were IRES between the EcoRI and XbaI site for internal ribosome  
 CC entry and translation of the second coding region. The present sequence  
 CC represents the human IgG1 heavy chain for use in the constructs of the  
 CC method of the invention.  
 XX  
 XX Sequence 330 AA;  
 SQ  
 Query Match 100.0%; Score 1263; DB 8; Length 330;  
 Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 99 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 158  
 QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGKEYCKVSNKALPAPIEKT 120  
 DB 159 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGKEYCKVSNKALPAPIEKT 218  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESGQPENNYKTP 180  
 DB 181 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGKEYCKVSNKALPAPIEKT 278  
 QY 181 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESGQPENNYKTP 278

DB 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESGQPENNYKTP 278  
 QY 181 PVLDSDGSGFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 279 PVLDSDGSGFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 330  
 RESULT 43  
 ADN36570  
 ID ADN36570 standard; protein; 330 AA.  
 XX  
 AC ADN36570;  
 XX  
 DT 17-JUN-2004 (first entry)  
 XX  
 DE Chemokine receptor inhibitor-related protein IgG1 #15.  
 XX  
 KW Chemokine receptor inhibitor; chimeric protein; HIV infection;  
 KW tumour metastasis; organ transplant rejection; autoimmune disease;  
 KW anti-HIV; cytostatic; immunosuppressive; IgG1; immunoglobulin G1.  
 XX  
 OS Unidentified.  
 XX  
 PN CN1435433-A.  
 XX  
 PD 13-AUG-2003.  
 XX  
 PF 30-AUG-2002; 2002CN-00129301.  
 XX  
 PR 30-AUG-2002; 2002CN-00129301.  
 XX  
 PA (GONG/) GONG X.  
 XX  
 PI Gong J;  
 XX  
 DR WPI; 2004-000227/01.  
 DR N-PSDB; ADN36588.  
 XX  
 PT Long-acting broad-spectrum chemotactic factor receptor inhibiting matter.  
 XX  
 PS Example 2; Page 28; 43pp; Chinese.  
 XX  
 CC The invention relates to chimeric proteins for inhibition of chemokine  
 CC receptors. The invention also relates to nucleic acids encoding the  
 CC chimeric proteins, and a process for preparing and testing the chimeric  
 CC proteins. The chimeric proteins provide long-acting, broad spectrum  
 CC inhibition of chemokine receptors with high selectivity. They can be used  
 CC to prevent or treat HIV infection, tumour metastasis, organ transplant  
 CC rejection and autoimmune diseases. The present sequence represents a  
 CC protein sequence which may be incorporated into a chimeric protein of the  
 CC invention.  
 XX  
 SQ Sequence 330 AA;  
 Query Match 100.0%; Score 1263; DB 8; Length 330;  
 Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 99 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 158  
 QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGKEYCKVSNKALPAPIEKT 120  
 DB 159 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGKEYCKVSNKALPAPIEKT 218  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESGQPENNYKTP 180  
 DB 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESGQPENNYKTP 278  
 QY 181 PVLDSDGSGFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232



```
KW Antibody; diagnostic; prophylaxis; therapy; heavy chain constant region;
KW CH; human; IgG1.
XX Homo sapiens.
XX WO2004070010-A2.
XX 19-AUG-2004.
XX
XX 02-FEB-2004; 2004WO-US002892.
XX
XX 01-FEB-2003; 2003US-0444229P.
XX
XX (TANO-) TANOX INC.
XX
XX Singh S, Foster C, Wu H;
XX WPI; 2004-604432/58.
XX
XX Generating a humanized, high affinity antibody from an antibody of
XX interest comprises selecting a suitable human template as the framework
XX for the H and L chain variable domains of the high affinity antibody to
XX be made.
XX
XX Example 11; SEQ ID NO 60; 100pp; English.
XX
XX The invention relates to a method for generating a humanised high
XX affinity antibody from an antibody of interest. The method involves
XX selecting a suitable human template as the framework for the H (heavy)
XX and L (light) chain variable (V) domains of the high affinity antibody to
XX be made. The method is useful for generating high affinity antibodies
XX useful in diagnostics, prophylaxis and treatment of diseases. The present
XX sequence is human IgG1 CH (heavy chain constant region) protein.
XX
XX Sequence 330 AA;
XX
XX Query Match 100.0%; Score 1263; DB 8; Length 330;
XX Best Local Similarity 100.0%; Pred. No. 2.3e-91;
XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 EPKSCDKTHCTCPPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
XX DB 99 EPKSCDKTHCTCPPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 158
XX
XX QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
XX DB 159 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218
XX
XX QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180
XX DB 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 278
XX
XX QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 232
XX DB 279 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 330
XX
XX RESULT 47
XX ADS87909
XX ID ADS87909 standard; protein; 330 AA.
XX
XX AC ADS87909;
XX
XX DT 18-NOV-2004 (first entry)
XX
XX DE Anti-IFN-gamma antibody heavy chain constant region SEQ ID NO:2.
XX
XX antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
XX anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
XX antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
XX gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
XX multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
XX myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
XX
```

```
KW systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
KW vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
KW immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX Homo sapiens.
XX WO2004034988-A2.
XX 29-APR-2004.
XX 14-OCT-2003; 2003WO-US032678.
XX 16-OCT-2002; 2002US-0419057P.
XX 17-JUN-2003; 2003US-0479241P.
XX (AMGE-) AMGEN INC.
XX
XX Welcher A, Chute H, Li L, Huang H;
XX WPI; 2004-348323/32.
XX N-PSDB; ADS87908.
XX
XX New antibody that binds specifically to IFN-gamma and comprising a heavy
XX chain CDR3; useful in preparing a composition for treating IFN-gamma
XX mediated diseases e.g., AIDS, psoriasis, myasthenia gravis, cirrhosis or
XX atherosclerosis.
XX
XX Example 4; SEQ ID NO 2; 115pp; English.
XX
XX The present invention describes an isolated antibody which binds
XX specifically to interferon (IFN)-gamma and comprises a heavy chain
XX complementarity determining region (CDR) 3 having a sequence comprising
XX at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36
XX (ADS87943) in the same order and spacing, or an amino acid sequence of
XX SEQ ID NO:37 (ADS87944). Also described: (1) an isolated polynucleotide
XX encoding the antibody; (2) a method of treating an IFN-gamma mediated
XX disease; and (3) a composition comprising a carrier and the antibody. The
XX IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-
XX HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and
XX antidiabetic activities, and can be used in gene therapy. The antibody is
XX useful in treating IFN-gamma mediated disease e.g., AIDS, rheumatoid
XX arthritis, inflammatory bowel disease, multiple sclerosis, Addison's
XX disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus
XX nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,
XX Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome
XX or haemolytic anaemia. The present sequence represents an immunoglobulin
XX G1 (IgG1) anti-IFN-gamma heavy chain constant region, which is used in
XX the exemplification of the present invention.
XX
XX Sequence 330 AA;
XX
XX Query Match 100.0%; Score 1263; DB 8; Length 330;
XX Best Local Similarity 100.0%; Pred. No. 2.3e-91;
XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 EPKSCDKTHCTCPPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
XX DB 99 EPKSCDKTHCTCPPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 158
XX
XX QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
XX DB 159 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218
XX
XX QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180
XX DB 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 278
XX
XX QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 232
XX DB 279 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 330
XX
XX RESULT 48
```

ADN3230  
ID ADN3230 standard; protein; 330 AA.  
XX  
AC ADN3230;  
XX  
DT 18-NOV-2004 (first entry)  
XX  
DE IgG1-CH heavy chain constant region.  
XX  
KW IgG1-CH; antibody; IgG; heavy chain constant region;  
KW FcRn binding affinity; asthma; autoimmune disease; cancer;  
KW viral infection; antiasthmatic; immunosuppressive; cytostatic; virucide.  
XX  
OS Unidentified.  
XX  
PN W02004035752-A2.  
XX  
PD 29-APR-2004.  
XX  
PF 15-OCT-2003; 2003WO-US033037.  
XX  
PR 15-OCT-2002; 2002US-0418972P.  
PR 10-APR-2003; 2003US-0462014P.  
PR 03-JUN-2003; 2003US-0475762P.  
PR 29-AUG-2003; 2003US-0499048P.  
XX  
PA (PROT-) PROTEIN DESIGN LABS INC.  
XX  
PI Hinton PR, Tsurushita N, Tso YJ, Vasquez M;  
XX  
DR WPI; 2004-348446/32.  
XX  
PT New modified antibody of class IgG having an altered FcRn binding  
PT affinity and/or serum half-life, useful in immunology and protein  
PT engineering, and for diagnosing or treating asthma, autoimmune diseases,  
PT cancer and viral infections.  
XX  
PS Disclosure; SEQ ID NO 3; 140pp; English.  
XX  
CC The invention relates to a modified antibody of class IgG where at least  
CC one amino acid residue from the heavy chain constant region is different  
CC from that present in an unmodified class IgG antibody, and where the FcRn  
CC binding affinity and/or serum half-life of the modified antibody is  
CC altered relative to that of the unmodified antibody. The methods and  
CC compositions of the present invention are useful in the fields of  
CC immunology and protein engineering, in particular for using modified  
CC class IgG antibodies for diagnosing and treating asthma, autoimmune  
CC diseases, cancer and viral infections. This sequence represents the  
CC antibody IgG1-CH heavy chain constant region of the invention.  
XX  
SQ Sequence 330 AA;  
Query Match 100.0%; Score 1263; DB 8; Length 330;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHCTCPPELGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 99 EPKSCDKTHCTCPPELGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158  
QY 61 NWYVDGVEVHNATKPREQYNSTYRVSVLTFLVHQDWLNGKEYCKCKVSNKALPAPIETK 120  
DB 159 NWYVDGVEVHNATKPREQYNSTYRVSVLTFLVHQDWLNGKEYCKCKVSNKALPAPIETK 218  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSGSQENNYKTTTP 180  
DB 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSGSQENNYKTTTP 278  
QY 181 PVLDSGGSFLYSLKLTVDKSRWQGNVFCSCVNHAEALHNHYTKSLSPGK 232  
DB 279 PVLDSGGSFLYSLKLTVDKSRWQGNVFCSCVNHAEALHNHYTKSLSPGK 330

RESULT 49  
ADN94906  
ID ADS94906 standard; protein; 330 AA.  
XX  
AC ADS94906;  
XX  
DT 02-DEC-2004 (first entry)  
XX  
DE Anti-IFN-gamma antibody heavy chain constant region SEQ ID NO:2.  
XX  
KW antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;  
KW anti-inflammatory; antiarthritic; anti-HIV; antianaemic;  
KW antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;  
KW gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;  
KW multiple sclerosis; Addison's disease; type I diabetes; psoriasis;  
KW myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;  
KW systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;  
KW vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;  
KW immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.  
XX  
OS Homo sapiens.  
XX  
PN W02004035747-A2.  
XX  
PD 29-APR-2004.  
XX  
PF 16-OCT-2003; 2003WO-US032871.  
XX  
PR 16-OCT-2002; 2002US-0419057P.  
PR 17-JUN-2003; 2003US-0479241P.  
XX  
PA (AMGE-) AMGEN INC.  
PA (MEDA-) MEDAREX INC.  
XX  
PI Welcher AA, Chute HT, Li Y, Huang H;  
XX  
DR WPI; 2004-348443/32.  
DR N-PSDB; ADS94905.  
XX  
PT New human anti-interferon-gamma neutralizing antibodies for treating  
PT interferon-gamma-mediated diseases, such as AIDS, rheumatoid arthritis,  
PT diabetes, Grave's disease, psoriasis, atherosclerosis or transplant  
PT rejection.  
XX  
PS Example 4; SEQ ID NO 2; 115pp; English.  
XX  
CC The present invention describes an isolated antibody which binds  
CC specifically to interferon (IFN)-gamma and comprises a heavy chain  
CC complementarity determining region (CDR) 3 having a sequence comprising  
CC at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36  
CC (ADS94940) in the same order and spacing, or an amino acid sequence of  
CC SEQ ID NO:37 (ADS94941). Also described: (1) an isolated polynucleotide  
CC encoding the antibody; (2) a method of treating an IFN-gamma mediated  
CC disease; and (3) a composition comprising a carrier and the antibody. The  
CC IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-  
CC HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and  
CC antidiabetic activities, and can be used in gene therapy. The antibody is  
CC useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid  
CC arthritis, inflammatory bowel disease, multiple sclerosis, Addison's  
CC disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus  
CC nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,  
CC Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome  
CC or haemolytic anaemia. The present sequence represents an immunoglobulin  
CC G1 (IgG1) anti-IFN-gamma heavy chain constant region, which is used in  
CC the exemplification of the present invention.  
XX  
SQ Sequence 330 AA;  
Query Match 100.0%; Score 1263; DB 8; Length 330;  
Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHCTCPPELGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Db 99 EPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDDEVKF 158  
Qy 61 NWYVDGVEVHNAKTKRBEQYNSTYRVSVLTVQLHODWLNKYEYKCKVSNKALPAPIEKT 120  
Db 159 NWYVDGVEVHNAKTKRBEQYNSTYRVSVLTVQLHODWLNKYEYKCKVSNKALPAPIEKT 218  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 278  
Qy 181 PVLDSGSGFFLYSKLTVDKSRWQOQGVFSCSVHMEALHNHYTQKSLSLSPGK 232  
Db 279 PVLDSGSGFFLYSKLTVDKSRWQOQGVFSCSVHMEALHNHYTQKSLSLSPGK 330

RESULT 50  
AAY91106  
ID AAY91106 standard; protein; 331 AA.  
XX AAY91106;  
AC AC  
XX XX  
DT 12-SEP-2003 (revised)  
DT 15-SEP-2000 (first entry)  
XX XX  
DE Human TR-Fc-delta-CH protein sequence SEQ ID NO:2.  
XX XX  
XX Human; transferrin receptor; immunoglobulin G; IgG; chimeric;  
KW hTR-Fc-delta-CH; hTR-Fc-delta-H; immune response; immunosuppressant;  
KW cell surface molecule induced macrophage activation; antidiabetic;  
KW antiarthritic; dermatological; antinflammatory; autoimmune disorder;  
KW diabetes; multiple sclerosis; rheumatoid arthritis;  
KW systemic lupus erythematosus.  
XX XX  
OS Homo sapiens.  
OS Chimeric.  
XX XX  
PN WO200024897-A1.  
XX XX  
PD 04-MAY-2000.  
XX XX  
PF 21-OCT-1999; 99WO-US024630.  
XX XX  
PR 26-OCT-1998; 98US-00178869.  
XX XX  
PA (CYTO-) CYTOTHERAPEUTICS INC.  
XX XX  
PI Tao W, Wong S, Hickey WF, Hammang JP, Baetge EE;  
XX XX  
DR WPI; 2000-350739/30.  
DR N-PSDB; AAA53126.  
XX XX  
PT Transformed cell containing a recombinant polynucleotide encoding an  
PT immunostimulatory cell surface polypeptide which induces removal of the  
PT cell when expressed, useful for treating various autoimmune diseases.  
XX XX  
PS Example 1; Page 48-50; 64pp; English.  
XX XX  
CC The present invention describes a transformed cell (C1) containing a  
CC recombinant polynucleotide (N1) comprising a promoter linked to a  
CC sequence encoding an immunostimulatory cell surface polypeptide (P1),  
CC where expression of P1 induces the removal of C1 from a host. C1  
CC expressing P1 induces macrophage activation, resulting in the rejection  
CC of the cell by a host. C1 expressing P1 is useful for treating various  
CC autoimmune disorders such as diabetes, multiple sclerosis, rheumatoid  
CC arthritis, systemic lupus erythematosus. The present sequence represents  
CC a human transferrin receptor and immunoglobulin G (IgG) heavy chain  
CC fragment chimeric protein, which is used in an example from the present  
CC invention. (Updated on 12-SEP-2003 to standardise OS field)  
XX XX  
SQ Sequence 331 AA;

Query Match 100.0%; Score 1263; DB 3; Length 331;

Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDDEVKF 60  
Db 100 EPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDDEVKF 159  
Qy 61 NWYVDGVEVHNAKTKRBEQYNSTYRVSVLTVQLHODWLNKYEYKCKVSNKALPAPIEKT 120  
Db 160 NWYVDGVEVHNAKTKRBEQYNSTYRVSVLTVQLHODWLNKYEYKCKVSNKALPAPIEKT 219  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 220 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 279  
Qy 181 PVLDSGSGFFLYSKLTVDKSRWQOQGVFSCSVHMEALHNHYTQKSLSLSPGK 232  
Db 280 PVLDSGSGFFLYSKLTVDKSRWQOQGVFSCSVHMEALHNHYTQKSLSLSPGK 331

RESULT 51  
ABU05197  
ID ABU05197 standard; protein; 331 AA.  
XX ABU05197;  
AC ABU05197;  
XX XX  
DT 29-JAN-2003 (first entry)  
XX XX  
DE Human expressed protein tag (EPT) #1863.  
XX XX  
KW Translational profiling; expressed protein tag; EPT; kinase; phosphatase;  
KW protease; protease inhibitor; transporter; cytoskeletal protein;  
KW receptor; transcription factor; cancer; MHC;  
KW major histocompatibility complex; myeloma; colon cancer; gastric cancer;  
KW adenocarcinoma; sarcoma; melanoma; lymphoma; leukaemia.  
XX XX  
OS Homo sapiens.  
XX XX  
PN WO200278524-A2.  
XX XX  
PD 10-OCT-2002.  
XX XX  
PF 28-MAR-2002; 2002WO-US009671.  
XX XX  
PR 28-MAR-2001; 2001US-0279495P.  
PR 21-MAY-2001; 2001US-0292544P.  
PR 08-AUG-2001; 2001US-0310801P.  
PR 01-OCT-2001; 2001US-0328370P.  
PR 04-DEC-2001; 2001US-0336780P.  
PR 20-FEB-2002; 2002US-0358985P.  
XX XX  
PA (ZYCO-) ZYCOS INC.  
XX XX  
PI Chicx RM, Tomlinson AJ, Urban RG;  
XX XX  
DR WPI; 2003-040607/03.  
XX XX  
PT New polypeptides (e.g. kinases, phosphatases, proteases, transporters,  
PT cytoskeletal proteins, receptors or transcription factors), useful for  
PT treating cancer, e.g. colon cancer, gastric cancer, sarcoma, lymphoma or  
PT leukemia.  
XX XX  
PS Example 2; SEQ ID NO 1863; 134pp; English.  
XX XX  
CC The invention describes a purified polypeptide, which comprises a  
CC fragment of a kinase, phosphatase, protease, protease inhibitor,  
CC transporter, cytoskeletal protein, receptor or transcription factor. The  
CC polypeptide is useful as an immunogenic composition for eliciting in a  
CC mammal an immunogenic response directed against any of the purified  
CC polypeptide. The purified polypeptide, or the antibody that binds to this  
CC polypeptide, is useful for treating cancer. The polypeptide is also  
CC useful for identifying compounds that binds to a naturally processed  
CC class I or class II MHC-binding polypeptide. The polypeptides and

CC polynucleotides are particularly useful for treating or preventing  
 CC myeloma, colon cancer, gastric cancer, adenocarcinoma, sarcoma, melanoma,  
 CC lymphoma or leukaemia. These are also useful for screening agents for  
 CC treating the above mentioned diseases. This sequence represents an  
 CC expressed protein tag (EPT) isolated from human tissue for translational  
 CC profiling. Note: This sequence does not appear in the printed  
 CC specification but was obtained in electronic format directly from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 CC  
 XX Sequence 331 AA;

Query Match 100.0%; Score 1263; DB 6; Length 331;  
 Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 SQ  
 QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 100 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 159  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 160 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 219  
 QY 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 Db 220 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 279  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232  
 Db 280 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 331

RESULT 52  
 ADL35095  
 ID ADL35095 standard; protein; 332 AA.  
 XX  
 AC ADL35095;  
 XX  
 DT 03-JUN-2004 (first entry)  
 XX  
 DE Human IgG1 (hOAT) kappa heavy chain constant domain protein SeqID 98.  
 XX  
 KW antibody; variable domain; framework region; FR; huFR;  
 KW immune system molecule; kappa; anti-tissue factor; hOAT; human.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02004020579-A2.  
 XX  
 PD 11-MAR-2004.  
 XX  
 PF 06-AUG-2003; 2003WO-US024637.  
 XX  
 PR 29-AUG-2002; 2002US-00230880.  
 XX  
 PA (SUNO-) SUNOL MOLECULAR CORP.  
 XX  
 PI Wong HC, Stinson JR, Mosquera LA;  
 XX  
 DR WPI; 2004-239169/22.  
 XX  
 PT Producing humanized antibodies for diagnostic and therapeutic purposes  
 PT comprises optimizing similarity between individual antibody framework  
 PT regions to help identify human framework regions suitable for making the  
 PT antibodies.  
 XX  
 PS Disclosure; SEQ ID NO 98; 137pp; English.  
 XX

CC This invention relates to a novel method for producing a humanised  
 CC antibody variable (V) domain or its fragment by optimising sequence  
 CC similarity between individual antibody framework regions (FRs) in order  
 CC to identify suitable human FRs (huFRs). Specifically, it refers to novel  
 CC immune system molecules i.e. humanised monoclonal antibodies that exhibit

CC suitable binding affinity with reduced immunogenicity in humans. The  
 CC present invention describes a method of mutagenising DNA of non-human FRs  
 CC to encode humanised FRs having an amino acid sequence that is  
 CC substantially identical to the selected human FR previously identified  
 CC through sequence similarity searching. As such, this method provides  
 CC humanised light or heavy chain V domains of the sequence huFR1-huFR2  
 CC -CDR2-huFR3-CDR3-huFR4, which can be used as therapeutic or diagnostic  
 CC products to treat and/or diagnose diseases in humans and animals.  
 CC Furthermore, the method expands the number of best fit possibilities that  
 CC can be generated and provides a rational basis for assembling nearly all  
 CC humanised immune system molecules of interest. This polypeptide sequence  
 CC is the human IgG1 kappa heavy chain constant domain protein of the  
 CC invention.  
 XX

SQ Sequence 332 AA;  
 Query Match 100.0%; Score 1263; DB 8; Length 332;  
 Best Local Similarity 100.0%; Pred. No. 2.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 101 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 160  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 161 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 220  
 QY 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 Db 221 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 280  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232  
 Db 281 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 332

RESULT 53  
 ADJ95912  
 ID ADJ95912 standard; protein; 333 AA.  
 XX  
 AC ADJ95912;  
 XX  
 DT 06-MAY-2004 (first entry)  
 XX  
 DE Human IgG heavy chain constant region.  
 XX  
 KW cytostatic; antibody therapy; immunoglobulin cassette construct;  
 KW immunoglobulin leader molecule; immunoglobulin domain;  
 KW immunoglobulin therapeutic molecule; monobody; cancer; immunoglobulin G;  
 KW IgG; heavy chain constant region; human.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US2004033561-A1.  
 XX  
 PD 19-FEB-2004.  
 XX  
 PF 17-OCT-2002; 2002US-00272899.  
 XX  
 PR 19-OCT-2001; 2001US-0350166P.  
 PR 26-JUN-2002; 2002US-0392364P.  
 XX  
 PA (MILL-) MILLENNIUM PHARM INC.  
 XX  
 PI O'Keefe TL, Healey JJ, Newman W, Ponath PD, Keyt BA;  
 XX  
 DR WPI; 2004-180050/17.  
 DR N-PSDB; ADJ95911.  
 XX

PT New isolated nucleic acid molecules having an immunoglobulin cassette  
 PT construct, useful for producing immunoglobulin therapeutic molecules  
 PT termed monobodies, used as a therapeutic group in cancer disorders.

XX Example 2; SEQ ID NO 8; 84pp; English.

XX The invention describes an isolated nucleic acid molecule comprising an

CC immunoglobulin cassette construct, wherein the immunoglobulin cassette

CC comprises an immunoglobulin leader molecule operably linked to a stable

CC immunoglobulin domain region. The methods and compositions of the present

CC invention are useful for producing immunoglobulins, in particular

CC immunoglobulin therapeutic molecules termed monobodies, used as a

CC therapeutic group in cancer disorders. This is the amino acid sequence of

CC the human immunoglobulin G (IgG) heavy chain constant region used in the

XX creation of immunoglobulin DNA cassette constructs.

SQ Sequence 333 AA;

Query Match 100.0%; Score 1263; DB 8; Length 333;

Best Local Similarity 100.0%; Pred. No. 2.3e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Db 102 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 161

QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTIVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Db 162 NWTVDGVEVHNATKPREEQYNSTYRVSVLTIVLHQDWLNGKEYKCKVSNKALPAPIEKT 221

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 180

Db 222 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 281

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232

Db 282 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 333

RESULT 54

ADL22761

ID ADL22761 standard; protein; 333 AA.

XX ADL22761;

XX 20-MAY-2004 (first entry)

DT Human antibody heavy chain variable region.

DE antibody; human; heavy chain variable region; therapeutic.

KW Homo sapiens.

OS WO2004013278-A2.

XX WO2004013278-A2.

XX 12-FEB-2004.

XX 01-AUG-2003; 2003WO-KR001555.

XX 02-AUG-2002; 2002KR-00045765.

PR 02-AUG-2002; 2002KR-00045767.

PR 02-AUG-2002; 2002KR-00045768.

XX (YUHA-) YUHAN CORP.

XX Lee J, Ko I, Song M, Kim C, Lee J, Yoo T, Kim J, Park S;

PI WPI; 2004-157108/15.

DR N-PSDB; ADL22760.

DR New expression vectors for an antibody heavy chain variable region,

XX lambda light chain variable region or kappa light chain variable region,

PT useful in developing therapeutic antibodies, e.g. humanized or chimeric

PT antibodies.

XX Example 3; Page 34-35; 39pp; English.

PS

XX The present invention relates to an expression vector for an antibody

CC heavy chain variable region, a lambda light chain variable region or a

CC kappa light chain variable region. The expression vectors are useful in

CC the development of therapeutic antibodies, e.g. humanized or chimeric

CC antibodies. The present sequence is a human heavy chain variable region

XX of the invention.

SQ Sequence 333 AA;

Query Match 100.0%; Score 1263; DB 8; Length 333;

Best Local Similarity 100.0%; Pred. No. 2.3e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Db 102 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 161

QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTIVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Db 162 NWTVDGVEVHNATKPREEQYNSTYRVSVLTIVLHQDWLNGKEYKCKVSNKALPAPIEKT 221

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 180

Db 222 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 281

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232

Db 282 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 333

RESULT 55

AAR43685

ID AAR43685 standard; protein; 351 AA.

XX AAR43685;

XX 25-MAR-2003 (revised)

DT 25-MAY-1994 (first entry)

XX Human kappa immunoglobulin light chain constant domain.

XX Human; immunoglobulin; constant; region; humanised; P-selectin; light;

KW blocking; antibody; heavy; chain; variable; murine; thrombotic disease;

KW monoclonal; P81.3; CDR; complementarity determining region; leukocyte;

KW expression vector; coexpression; pHCMV-1748RHA-gamma1Ci-dhfr; epitope;

KW pHCMV-1748RLA-KR-neo; P81.3/Humanised version A; vascular endothelium;

KW pHCMV-1747CH-gammaCi-neo; pHCMV-1747-Cl-KR-neo; P81.3 chimera;

KW acute lung injury; ischaemia reperfusion injury; inflammation.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Domain 22..119

FT /note= "CH1 domain"

FT Region 120..134

FT /note= "Hinge region"

FT Domain 135..244

FT /note= "CH2 domain"

FT Domain 245..352

FT /note= "CH3 domain"

XX WO9321956-A1.

XX 11-NOV-1993.

XX 04-MAY-1993; 93WO-US004274.

XX 05-MAY-1992; 92US-00880196.

XX (CYTE-) CYTEL CORP.

XX Chestnut RW, Polley MJ, Paulson JC;

PI

XX WPI; 1993-368423/46.  
 DR N-PSDB; AAQ51547.  
 XX  
 XX  
 PT Anti-P-selectin antibody for ischaemia acute lung injury treatment -  
 PT useful to treat inflammation and pathological conditions of intercellular  
 PT adhesion by competitive inhibition assay.  
 XX  
 XX  
 PS Example 10; Fig 9; 82pp; English.  
 XX  
 CC The sequences given in AAR43685-86 represent human immunoglobulin  
 CC constant regions which were used in the production of the humanised P-  
 CC selectin blocking antibody, along with the heavy and light chain variable  
 CC region coding sequences of the murine monoclonal antibody PBL1.3, given in  
 CC AAR43687-88. The CDRs from PBL1.3 heavy and light chains were substituted  
 CC for the CDRs of human heavy and light chains. The humanised variable  
 CC regions were inserted into expression vectors. By coexpression of  
 CC appropriate combinations of heavy and light chains, several humanised  
 CC antibodies can be expressed. Coexpression of pHCMV-1749RHA-gamma1Ci-dhfr  
 CC and pHCMV-1748RLA-KR-neo gives rise to the PBL1.3/Humanised version A.  
 CC Coexpression of pHCMV-1747CH- gammaCi-neo and pHCMV-1747-CL-KR-neo gives  
 CC rise to the PBL1.3 chimera. These humanised antibodies selectively bind  
 CC epitopes on P-selectin and block adhesion of leukocytes to the vascular  
 CC endothelium. They may be used to treat inflammatory and thrombotic  
 CC diseases and other pathological conditions involving P-selectin and  
 CC antibodies to it, esp. acute lung injury and ischaemia reperfusion  
 CC injury. (Updated on 25-MAR-2003 to correct PN field.)  
 XX  
 XX Sequence 351 AA;  
 SQ  
 Query Match 100.0%; Score 1263; DB 2; Length 351;  
 Best Local Similarity 100.0%; Pred. No. 2.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 120 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 179  
 QY 61 NWTVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 180 NWTVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 239  
 QY 121 ISKAKGQPREPPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 Db 240 ISKAKGQPREPPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 299  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQOQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232  
 Db 300 PVLDSGSGFFLYSKLTVDKSRWQOQGNVFSCSVMHEALHNHYTQKSLSLSPGK 351  
 RESULT 56  
 ADJ95976  
 ID ADJ95976 standard; protein; 356 AA.  
 AC  
 AC ADJ95976;  
 XX  
 XX 06-MAY-2004 (first entry)  
 DT  
 DE Immunoglobulin DNA cassette polypeptide seqid 72.  
 DE  
 XX cytostatic; antibody therapy; immunoglobulin cassette construct;  
 KW immunoglobulin leader molecule; immunoglobulin domain;  
 KW immunoglobulin therapeutic molecule; monobody; cancer.  
 XX  
 OS Synthetic.  
 XX  
 XX US2004033561-A1.  
 PN  
 XX 19-FEB-2004.  
 PD  
 XX 17-OCT-2002; 2002US-00272899.  
 PF  
 XX

PR 19-OCT-2001; 2001US-0350166P.  
 PR 26-JUN-2002; 2002US-0392364P.  
 XX  
 PA (MILL-) MILLENNIUM PHARM INC.  
 XX  
 PI O'keefe TL, Healey JJ, Newman W, Ponath PD, Keyt BA;  
 XX  
 XX WPI; 2004-180050/17.  
 DR N-PSDB; ADJ95975.  
 DR  
 XX  
 PT New isolated nucleic acid molecules having an immunoglobulin cassette  
 PT construct, useful for producing immunoglobulin therapeutic molecules  
 PT termed monobodies, used as a therapeutic group in cancer disorders.  
 XX  
 PS Disclosure; SEQ ID NO 72; 84pp; English.  
 XX  
 CC The invention describes an isolated nucleic acid molecule comprising an  
 CC immunoglobulin cassette construct, wherein the immunoglobulin cassette  
 CC comprises an immunoglobulin leader molecule operably linked to a stable  
 CC immunoglobulin domain region. The methods and compositions of the present  
 CC invention are useful for producing immunoglobulins, in particular  
 CC immunoglobulin therapeutic molecules termed monobodies, used as a  
 CC therapeutic group in cancer disorders. This is the amino acid sequence of  
 CC an immunoglobulin DNA cassette construct.  
 XX  
 XX Sequence 356 AA;  
 SQ  
 Query Match 100.0%; Score 1263; DB 8; Length 356;  
 Best Local Similarity 100.0%; Pred. No. 2.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 125 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 184  
 QY 61 NWTVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 185 NWTVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 244  
 QY 121 ISKAKGQPREPPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 Db 245 ISKAKGQPREPPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 304  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQOQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232  
 Db 305 PVLDSGSGFFLYSKLTVDKSRWQOQGNVFSCSVMHEALHNHYTQKSLSLSPGK 356  
 RESULT 57  
 ABP98040  
 ID ABP98040 standard; protein; 358 AA.  
 XX  
 AC ABP98040;  
 XX  
 XX 11-AUG-2003 (first entry)  
 DT  
 DE Amino acid sequence of a human HE4a polypeptide.  
 DE  
 KW Malignant condition; antibody; HE4a; antigen; adenocarcinoma;  
 KW mesothelioma; ovarian carcinoma; pancreatic carcinoma;  
 KW non-small cell lung carcinoma; HE4.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003021273-A2.  
 PN  
 XX 13-MAR-2003.  
 PD  
 XX 29-AUG-2002; 2002WO-EP009653.  
 PF  
 XX 29-AUG-2001; 2001US-0316537P.  
 PR  
 XX (PACI-) PACIFIC NORTHWEST RES FOUND.  
 PA

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XX Schummer M, Hellstrom I, Hellstrom KE, Ledbetter JA;
PI Hayden-Ledbetter M;
XX
XX WPI; 2003-300923/29.
XX N-PSDB; ACC43451.
XX
XX Screening malignancy, e.g. adenocarcinoma, in a subject by contacting
XX sample of subject with antibody specific to HE4a antigen, and detecting
XX the presence of soluble or cell surface form of HE4a antigen.
XX
XX Claim 40; Page 79-80; 85pp; English.
XX
XX The specification describes a method of screening for the presence of a
XX malignant condition in a subject. The method involves contacting a
XX biological sample from the subject with an antibody specific for the HE4a
XX antigen to determine the presence of a molecule naturally occurring in
XX soluble form and having an antigenic determinant that is reactive with
XX the antibody. Binding of the antibody to the antigenic determinant is
XX determined to detect the malignant condition. The method is useful for
XX screening for the presence of a malignant condition e.g. adenocarcinoma,
XX mesothelioma, ovarian carcinoma, pancreatic carcinoma and non-small cell
XX lung carcinoma. The antibody is useful for treating a malignant
XX condition. The present sequence represents human HE4a. HE4a refers to the
XX soluble and cell surface form of HE4
XX
XX Sequence 358 AA;
XX
XX Query Match 100.0%; Score 1263; DB 6; Length 358;
XX Best Local Similarity 100.0%; Pred. No. 2.5e-91;
XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
XX Db 127 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 186
XX
XX QY 61 NWYVDGVEVHNNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
XX Db 187 NWYVDGVEVHNNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 246
XX
XX QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180
XX Db 247 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 306
XX
XX QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKLSLSGPK 232
XX Db 307 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKLSLSGPK 358
XX
XX RESULT 58
XX ADF73150
XX ID ADF73150 standard; protein; 367 AA.
XX AC ADF73150;
XX XX
XX 26-FEB-2004 (first entry)
XX
XX RELP-Fc fusion protein amino acid sequence SEQ ID NO:9.
XX
XX anti-RELP fusion antibody; RELP fusion antibody; cytostatic;
XX cardiovascular; immunomodulator; neuroprotective; nootropic;
XX gene therapy; cancer; immune disorder; cardiovascular disorder;
XX neurological disorder; human.
XX
XX Synthetic.
XX Homo sapiens.
XX WO2003102017-A2.
XX
XX 11-DEC-2003.
XX
XX 02-JUN-2003; 2003WO-US017357.
XX
XX

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PR 03-JUN-2002; 2002US-0385305P.
XX (CENZ ) CENTOCOR INC.
XX
XX Carton J, Giles-Komar J, Scallion B, Staquet K;
XX WPI; 2004-053426/05.
XX N-PSDB; ADF73151.
XX
XX New mammalian Reg like protein (RELP) fusion antibody, useful for
XX preparing a composition for diagnosing or treating a RELP protein-related
XX condition in a cell, tissue, organ or animal, e.g., cancer.
XX
XX Example 2; SEQ ID NO 9; 78pp; English.
XX
XX The present invention describes a mammalian anti-RELP fusion antibody (I)
XX which comprises: (a) at least one heavy chain variable region comprising
XX ADF73148 or ADF73168 and at least one light chain variable region
XX comprising ADF73149, ADF73169 or ADF73180; or (b) all of the
XX complementarity determining regions (CDRs) of ADF73142 to ADF73147 or
XX ADF73162 to ADF73167. Also described: (1) a pharmaceutical composition
XX comprising the mammalian RELP fusion antibody and at a carrier or diluent
XX ; (2) an isolated nucleic acid encoding the mammalian RELP fusion
XX antibody; (3) an isolated nucleic acid vector comprising the isolated
XX nucleic acid; (4) a prokaryotic or eukaryotic host cell comprising the
XX isolated nucleic acid; (5) a method for producing at least one RELP
XX fusion antibody; (6) a method for diagnosing or treating a RELP protein-
XX related condition in a cell, tissue, organ or animal; (7) an article of
XX manufacture for human pharmaceutical or diagnostic use, comprising
XX packaging material and a container comprising a solution or a lyophilised
XX form of the mammalian RELP fusion antibody; and (8) a medical device,
XX comprising the isolated mammalian RELP fusion antibody, where the device
XX is suitable to contacting or administering the at least one RELP fusion
XX antibody. (1) has cytostatic, cardiovascular, immunomodulator,
XX neuroprotective and nootropic activities, and can be used in gene
XX therapy. The mammalian RELP fusion antibody is useful for preparing a
XX composition for diagnosing or treating a RELP protein-related condition
XX in a cell, tissue, organ or animal, e.g., cancer, immune disorders,
XX cardiovascular and neurological disorders. The present sequence is used
XX in the exemplification of the present invention.
XX
XX Sequence 367 AA;
XX
XX Query Match 100.0%; Score 1263; DB 8; Length 367;
XX Best Local Similarity 100.0%; Pred. No. 2.6e-91;
XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
XX Db 136 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 195
XX
XX QY 61 NWYVDGVEVHNNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
XX Db 196 NWYVDGVEVHNNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 255
XX
XX QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180
XX Db 256 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 315
XX
XX QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKLSLSGPK 232
XX Db 316 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKLSLSGPK 367
XX
XX RESULT 59
XX AAP91918
XX ID AAP91918 standard; protein; 371 AA.
XX
XX AAP91918;
XX
XX 25-MAR-2003 (revised)
XX 31-OCT-2002 (revised)
XX 14-MAY-1990 (first entry)
XX

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XX DE Sequence of the linked immunoglobulin gamma chain fragment.  
 XX DE Immunoglobulin gamma chain; IgG1 heavy chain constant region.  
 XX KW Homo sapiens.  
 XX OS

XX FH Key Location/Qualifiers  
 XX FT Misc-difference 42..43 /note= "Insert site"  
 XX FT Misc-difference 144..145 /note= "Insert site"

XX PN EP314317-A.

XX PD 03-MAY-1989.

XX PF 03-OCT-1988; 88EP-00309194.

XX PR 02-OCT-1987; 87US-00104329.

XX PR 28-SEP-1988; 88US-00250785.

XX PA (GETH ) GENENTECH INC.

XX PI Capon DJ, Gregory TJ;

XX DR WPI; 1989-131855/18.

XX DR N-PSDB; AAN90779.

XX CC Compens. contg. adhesion variants - useful in therapy and diagnostics,  
 XX CC e.g. CD4 variants which are therapeutically useful for treating human  
 XX CC immuno-deficiency virus.

XX PS Disclosure; Fig 4a-4b; 36pp; English.

XX CC It may be fused to the first 180 N-terminal residues of CD4 at the C-  
 XX CC terminus. The fusion protein may be used for antiviral of  
 XX CC immunomodulatory therapy particularly in treatment of HIV infection.  
 XX CC (Updated on 31-OCT-2002 to add missing OS field.) (Updated on 25-MAR-2003  
 XX CC to correct PR field.) (Updated on 25-MAR-2003 to correct PI field.)

XX SQ Sequence 371 AA;

Query Match 100.0%; Score 1263; DB 1; Length 371;  
 Best Local Similarity 100.0%; Pred. No. 2.7e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 140 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 199

QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 200 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 259

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 319

QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSCVMEALHNHYTQKSLSLSPGK 232  
 DB 320 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSCVMEALHNHYTQKSLSLSPGK 371

RESULT 60

AAP93558

ID AAP93558 standard; protein; 371 AA.

XX AAP93558;

XX 25-MAR-2003 (revised)

DT 06-JUN-1990 (first entry)

XX

DE Linked human IgG1 (gamma 1) chain fragment.  
 XX KW Human IgG1; gamma 1; immunoglobulin; CD4; fusion protein.  
 XX OS Homo sapiens.

XX PN WO8902922-A.

XX PD 06-APR-1989.

XX PF 03-OCT-1988; 88WO-US003414.

XX PR 02-OCT-1987; 87US-00104329.

XX PR 28-SEP-1988; 88US-00250785.

XX PA (GETH ) GENENTECH INC.

XX PI Capon DJ, Gregory TJ;

XX DR WPI; 1989-114397/15.

XX DR N-PSDB; AAN90736.

XX CC New nucleic acid sequences encoding adhesion, esp. CD 4, variants -  
 XX CC partic. with trans-membrane domain inactivated or fused to other peptide,  
 XX CC useful esp. for treating HIV infections.

XX PS Fig 4A-4B2; pp. 10/13-12/13; 78pp; English.

XX CC It is employed in the prepn. of CD4 fusions. CD4 fusion proteins can have  
 XX CC antiviral and immunomodulatory activity and are esp. useful for treating  
 XX CC HIV infections, regardless of genetic variation within the virus. They  
 XX CC and antibodies raised against them can also be used diagnostically for  
 XX CC assaying adhesions and their ligands. (Updated on 25-MAR-2003 to correct  
 XX CC PR field.) (Updated on 25-MAR-2003 to correct PA field.)

XX SQ Sequence 371 AA;

Query Match 100.0%; Score 1263; DB 1; Length 371;  
 Best Local Similarity 100.0%; Pred. No. 2.7e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 140 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 199

QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 200 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 259

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 319

QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSCVMEALHNHYTQKSLSLSPGK 232  
 DB 320 PVLDSGSGFFLYSKLTVDKSRWQQGNVFSCVMEALHNHYTQKSLSLSPGK 371

RESULT 61

AAM60037

ID AAM60037 standard; protein; 376 AA.

XX AC AAM60037;

XX DT 11-SEP-1998 (first entry)

XX DE Antigenic peptide hFas (nd29) containing Fc region.

XX KW Fas ligand; Fas antagonist; apoptosis related disease; liver disease;

XX KW heart failure; kidney failure; graft-versus-host disease; antibody;

XX KW myocardial infarction; ischemic restenosis; endotoxic shock.

XX OS Homo sapiens.

DT	08-MAY-2003 (first entry)	XX	Concatameric immunoadhesion human protein sequence SEQ ID No 16.
DE		XX	Antinflammatory; antibacterial; immunosuppressive; antirheumatic;
KW	/note= "hFas antigen signal peptide"	XX	antiarthritic; immunomodulator; concatameric protein; soluble domain;
KW	30..376	XX	dimeric protein; inflammation; septicemia; cytotoxicity;
KW	/note= "hFas (nd29) protein"	XX	rheumatoid arthritis; cachexia; inflammation; human.
OS		XX	Homo sapiens.
WO2003010202-A1.		XX	
06-FEB-2003.		XX	
26-JUL-2002; 2002WO-KR001427.		XX	
26-JUL-2001; 2001KR-00045028.		XX	
(MEDE-) MEDEXGEN CO LTD.		XX	
Chung Y, Han J, Lee H, Choi E, Kim J;		XX	
WPI; 2003-229639/22.		XX	
N-PSDB; ABT32048.		XX	
New concatameric protein having two soluble domains, useful for		XX	
diagnosing and treating disorders associated with the dimeric protein or		XX	
its glycosylated form, such as inflammation, septicemia, rheumatoid		XX	
arthritis and cachexia.		XX	
Disclosure; Page 162-164; 211pp; English.		XX	
The invention relates to a novel concatameric protein comprising two		XX	
soluble domains, in which an N-terminus of a soluble domain of a		XX	
biologically active protein is linked to a C-terminus of an identical		XX	
soluble domain or a different soluble domain of a biologically active		XX	
protein. The methods and compositions of the present invention are useful		XX	
for the diagnosis and treatment of disorders associated with dimeric		XX	
protein or its glycosylated form, such as inflammation, septicemia,		XX	
cytotoxicity, rheumatoid arthritis, cachexia and other inflammatory-		XX	
related diseases. This sequence represents the human concatameric protein		XX	
of the invention		XX	
Sequence 377 AA;		SQ	
Query Match 100.0%; Score 1263; DB 6; Length 377;			
Best Local Similarity 100.0%; Pred. No. 2.7e-91;			
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;			
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60		QY	1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60
DB 146 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 205		DB	146 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 205
QY 61 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120		QY	61 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
DB 206 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 265		DB	206 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 265
QY 121 ISKAKGQRPQVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 180		QY	121 ISKAKGQRPQVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 180
DB 266 ISKAKGQRPQVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 325		DB	266 ISKAKGQRPQVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 325
QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232		QY	181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
DB 326 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 377		DB	326 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 377
RESULT 63		RESULT 63	
ADQ79914		ADQ79914	
ID ADQ79914 standard; protein; 377 AA.		ID	ADQ79914 standard; protein; 377 AA.
XX		XX	
AC ADQ79914;		AC	ADQ79914;
XX		XX	

09-SEP-2004 (first entry)  
 Human CTLA4/Ig construct.  
 Human, tumour necrosis factor receptor; TNFR1; TNFR2; CTLA4; CD2; IgG;  
 immunoglobulin; concatameric fused dimer protein; immunoadhesin;  
 FC fragment; hinge.  
 Homo sapiens.  
 Synthetic.  
 KR2004009997-A.  
 31-JAN-2004.  
 26-JUL-2002; 2002KR-00045921.  
 26-JUL-2002; 2002KR-00045921.  
 (MEDE-) MEDEXGEN INC.  
 Choi EY, Han JU, Jung YH, Kim JM, Lee HJ;  
 WPI; 2004-458871/43.  
 N-PSDB; ADQ79913.  
 Concatameric immunoadhesin.  
 Example 2; SEQ ID NO 16; 129pp; Korean.  
 The invention relates to a concatameric fused dimer protein and  
 glycosylation modification protein providing concatameric immunoadhesin  
 with improved efficacy and stability. The concatameric protein is  
 characterized by binding C-terminal of one biologically  
 active protein with N-terminal of same or different biologically active  
 protein, e.g. tumour necrosis factor receptors (TNFR1 and TNFR2), CD2 and  
 CTLA4. Two monomer proteins which are formed by fusing the extracellular  
 region of a protein participating in the same immune reaction to an  
 immunoglobulin Fc fragment, bound together at a hinge region by  
 disulphide bond to give the concatameric fused dimer protein, wherein the  
 immunoglobulin is IgG. The present sequence represents a monomeric or  
 dimeric IgG fusion protein (or a dimeric fusion protein containing  
 engineered N-glycosylation sites, designated "mg").  
 Sequence 377 AA;  
 Query Match 100.0%; Score 1263; DB 8; Length 377;  
 Best Local Similarity 100.0%; Pred. No. 2.7e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 146 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 205  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 206 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 265  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180  
 DB 266 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 325  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVWHEALHNHYTQKSLSLSPGK 232  
 DB 326 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVWHEALHNHYTQKSLSLSPGK 377  
 RESULT 64  
 ID AAW49073  
 AC AAW49073 standard; protein; 379 AA.  
 AC AAW49073;  
 XX

DT 18-NOV-1998 (first entry)  
 XX Recombinant human MetFc-OB protein.  
 DE Recombinant human MetFc-OB protein.  
 XX Recombinant human MetFc-OB protein; chimeric; immunoglobulin; diabetes;  
 KW high blood lipid level; arterial sclerosis; stroke; Fc-OB fusion protein.  
 KW high blood lipid level; arterial sclerosis; stroke; Fc-OB fusion protein.  
 XX Homo sapiens.  
 OS Synthetic.  
 OS Synthetic.  
 FH Key Location/Qualifiers  
 FT Protein 2..379  
 FT /note= "Recombinant human Fc-OB protein"  
 FT Region 234..379  
 FT /note= "Human OB protein"  
 XX WO9828427-A1.  
 FN 02-JUL-1998.  
 PD 11-DEC-1997; 97WO-US023183.  
 PP 20-DEC-1996; 96US-00770973.  
 PR (AMGE-) AMGEN INC.  
 PA Mann MB, Hecht RI;  
 PI WPI; 1998-377658/32.  
 DR N-PSDB; AAV32900.  
 XX New fusion proteins of OB and Fc - used for treating e.g. excess weight,  
 PT diabetes, arterial sclerosis, arterial plaque, high blood lipid level,  
 PT gall stones or stroke.  
 XX Claim 2; Fig 3A-3C; 107pp; English.  
 PS The present sequence represents a recombinant human MetFc-OB fusion  
 CC protein. The invention provides Fc-OB fusion proteins whereby the Fc  
 CC region of an immunoglobulin or its analogue is linked, either directly or  
 CC indirectly using a linker, to the N-terminus of an OB protein or its  
 CC analogue. The Fc-OB fusion proteins are claimed to demonstrate increased  
 CC stability and clearance rate and decreased degradation as compared to OB  
 CC protein or a fusion of Fc to the C-terminus of the OB protein. These Fc-  
 CC OB fusion proteins are also claimed to be useful for treating excess  
 CC weight in an individual or animal or for treating co-morbidities  
 CC associated with excess fat such as diabetes, high blood lipid level,  
 CC arterial sclerosis and stroke  
 CC Sequence 379 AA;  
 Query Match 100.0%; Score 1263; DB 2; Length 379;  
 Best Local Similarity 100.0%; Pred. No. 2.7e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 2 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 61  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 62 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 121  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180  
 DB 122 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 181  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVWHEALHNHYTQKSLSLSPGK 232  
 DB 182 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVWHEALHNHYTQKSLSLSPGK 233  
 RESULT 65

AAW83962  
ID AAW83962 standard; protein; 379 AA.  
XX  
AC AAW83962;  
XX  
DT 15-FEB-1999 (first entry)  
XX  
DE Recombinant human metFc-OB protein.  
XX  
KW Recombinant; metFc-OB protein; Fc region; immunoglobulin; Ig; OB;  
KW obesity; human; adiposity; blood lipid; diabetes type II; insulin;  
KW hypoglycaemic; antihypertensive; diuretic; appetite suppressant;  
KW suspension.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT Misc-difference 5 /note= "can be optionally replaced with Ala"  
FT Misc-difference 20 /note= "can be optionally replaced with Glu"  
FT Misc-difference 103 /note= "can be optionally replaced with Ala"  
FT Misc-difference 105 /note= "can be optionally replaced with Ala"  
FT Misc-difference 107 /note= "can be optionally replaced with Ala"  
FT Misc-difference 107 /note= "can be optionally replaced with Ala"  
XX  
PN WO9846257-A1.  
XX  
PD 22-OCT-1998.  
XX  
XX 16-APR-1998; 98WO-US007828.  
XX  
PR 17-APR-1997; 97US-00843971.  
PR 14-APR-1998; 98US-00059467.  
XX  
PA (AMGE-) AMGEN INC.  
XX  
PI Brems DN, French DL, Speed MA;  
XX  
XX WPI; 1998-594525/50.  
DR N-PSDB; AAV69685.  
XX  
XX Concentrated suspension of fusion of obesity protein with Fc  
PT immunoglobulin fragment - stable at physiological pH, used for e.g.  
PT reduction of weight and blood lipid levels, and for treatment of type II  
PT diabetes.  
XX  
PS Claim 2; Fig 5A-C; 47pp; English.  
XX  
CC This represents a recombinant metFc-OB protein which consists of an Fc  
CC region of human immunoglobulin (Ig) fused to a human OB (obesity)  
CC protein. The invention provides a human OB protein suspension that  
CC contains at least 0.5 mg/ml of the human OB protein derivatised by  
CC attachment of the Fc region of an Ig to the N-terminus of OB, and has a  
CC pH 6-8. The suspensions are used to reduce weight, adiposity and blood  
CC lipid levels, to treat or prevent diabetes type II, and to increase lean  
CC mass and insulin sensitivity. They may be used in conjunction with  
CC insulin, hypoglycaemics, antihypertensives, diuretics, appetite  
CC suppressants etc. These suspensions are stable and active at  
CC physiological pH and are ready-for-use formulations that do not require  
CC freezing or freeze drying. As they are very concentrated, only small  
CC volumes are required and they provide a sustained-release effect, with  
CC increased potency and reduced frequency of injection  
XX  
SQ Sequence 379 AA;  
Query Match 100.0%; Score 1263; DB 2; Length 379;  
Best Local Similarity 100.0%; Pred. No. 2.7e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHRTCPPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

Db 2 EPKSCDKTHRTCPPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 61  
QY 61 NMYVDGVEVHNAKTREBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 62 NMYVDGVEVHNAKTREBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 121  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 122 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 181  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232  
Db 182 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 233

RESULT 66  
ABB07681  
ID ABB07681 standard; protein; 388 AA.  
XX  
AC ABB07681;  
XX  
DT 10-JUN-2002 (first entry)  
XX  
DE MOG-Fc fusion protein.  
XX  
KW B-cell; autoreactive antigen; immunoglobulin receptor; blood cell;  
KW complement system; MOG; MOG-Fc; fusion protein; auto-antigen; muscular;  
KW immunosuppressive; dermatological; nephrotropic; antianemic; antithyroid;  
KW antirheumatic; antiarthritic; antinflammatory; antidiabetic; vasotropic;  
KW thymimetic; neuroprotective; haemostatic; gastrointestinal;  
KW anti-allergic; gene therapy.  
XX  
OS Homo sapiens.  
XX  
XX WO200216414-A2.  
XX  
XX 28-FEB-2002.  
XX  
XX 22-AUG-2001; 2001WO-EP009714.  
XX  
XX 22-AUG-2000; 2000EP-00117354.  
XX  
XX (MICR-) MICROMET AG.  
XX  
XX Zocher M, Baeuerle P, Dreier T;  
XX  
XX WPI; 2002-257905/30.  
DR N-PSDB; ABA95203.  
XX  
XX Composition, useful for selective elimination of autoreactive B cells in  
PT treatment and prevention of autoimmune diseases, comprises (poly)peptide  
PT construct containing effector molecule and autoreactive antigen.  
XX  
XX Claim 21; Page 93-95; 96pp; English.  
XX  
CC The invention provides a composition for the selective elimination of  
CC autoreactive B-cells comprising at least one (poly)peptide construct  
CC containing: (a) an autoreactive antigen or its fragment specifically  
CC recognized by the immunoglobulin receptors of the B-cells; and (b) an  
CC effector molecule capable of interacting with and/or activating blood  
CC cells, natural killer (NK)-cells, T-cells, macrophages, monocytes and/or  
CC granulocytes and/or capable of activating the complement system. The  
CC compositions are useful for the selective elimination of autoreactive B  
CC cells, selective reduction of autoreactive immunoglobulins and for the  
CC treatment and prevention of autoimmune diseases e.g. pemphigus vulgaris,  
CC bullous pemphigoid, Goodpasture's syndrome, autoimmune hemolytic anemia,  
CC rheumatoid arthritis, systemic lupus erythematosus (SLE), Graves'  
CC disease, contact dermatitis, myasthenia gravis, juvenile diabetes,  
CC Sjogren's syndrome, autoimmune thyroiditis, Addison's disease, multiple  
CC sclerosis, thrombocytopenic purpura, pemphigus foliaceus and celiac  
CC disease. The present sequence represents the amino acid sequence of the  
CC construct comprising the MOG-Fc fusion protein where MOG is the auto-

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CC antigen
XX Sequence 388 AA;
SQ
Query Match 100.0%; Score 1263; DB 5; Length 388;
Best Local Similarity 100.0%; Pred. No. 2.8e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 157 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 216
QY 61 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 217 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 276
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
DB 277 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 336
QY 181 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232
DB 337 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 388
RESULT 67
ADA14289
ID ADA14289 standard; protein; 388 AA.
AC ADA14289;
XX
XX 06-NOV-2003 (first entry)
XX Mutated MOG-Fc construct protein SEQ ID NO:28.
XX
XX polypeptide construct; autoreactive antigen; immunoglobulin receptor;
KW Ig receptor; autoreactive B-cell; autoimmune disease; immunosuppressive;
KW neuroprotective; dermatological; antiarthritic; antithyroid;
KW antidiabetic; hepatotropic; gene therapy; pemphigus vulgaris;
KW Bullous pemphigoid; Goodpasture's syndrome;
KW autoimmune haemolytic anaemia; AIHA; rheumatoid arthritis;
KW Systemic lupus erythematosus; Grave's disease;
KW autoimmune hyperthyroidism; contact dermatitis; Myasthenia gravis;
KW Juvenile diabetes; Sjogren's syndrome; autoimmune thyroiditis;
KW primary hypoadrenalism; Addison's disease; multiple sclerosis;
KW thrombocytopenic purpura; pemphigus fallacious; linear IgA dermatosis;
KW celiac disease; human; MOG; mutant; MOG-Fc.
XX
XX Synthetic.
OS
XX Homo sapiens.
OS
XX WO2003068822-A2.
XX
XX 21-AUG-2003.
XX
XX 12-FEB-2003; 2003WO-EP001389.
XX
XX 13-FEB-2002; 2002EP-00003332.
XX
XX (MICR-) MICROMET AG.
XX
XX Zoehrer M, Dreier T, Baeuerle P;
XX WPI; 2003-663797/62.
XX DR N-PSDB; ADA14288.
XX
XX New polypeptide construct, useful for preparing a composition for
PT treating or preventing autoimmune diseases e.g. rheumatoid arthritis,
PT contact dermatitis or multiple sclerosis.
XX
XX Example 18; Page 139-141; 141pp; English.
XX
XX The present invention describes a polypeptide construct (I) comprising at

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CC least two domains or two sets of domains. The domain comprises a de-
CC immunised, autoreactive antigen or its fragment that is specifically
CC recognised by the immunoglobulin (Ig) receptors of autoreactive B-cells.
CC A further domain comprises an effector molecule capable of interacting
CC with or activating NK-cells, T-cells, macrophages, monocytes or
CC granulocytes or capable of activating the complement system. Also
CC described: (1) a polynucleotide encoding (1); (2) a vector comprising the
CC polynucleotide of (1); (3) a host transformed with the vector of (2); (4)
CC a composition comprising (1), polynucleotide of (1), vector of (2) or
CC host of (3); and (5) treating or preventing autoimmune disease. (I) has
CC immunosuppressive, neuroprotective, dermatological, antiarthritic,
CC antithyroid, antidiabetic and hepatotropic activities, and can be used in
CC gene therapy. The polypeptide construct is useful for preparing a
CC composition for treating or preventing autoimmune diseases comprising
CC pemphigus vulgaris, Bullous pemphigoid, Goodpasture's syndrome,
CC autoimmune haemolytic anaemia (AIHA), rheumatoid arthritis, Systemic
CC lupus erythematosus, Grave's disease (autoimmune hyperthyroidism),
CC contact dermatitis, Myasthenia gravis, juvenile diabetes, Sjogren's
CC syndrome, autoimmune thyroiditis, primary hypoadrenalism (Addison's
CC disease), multiple sclerosis, thrombocytopenic purpura, pemphigus
CC fallacious, linear IgA dermatosis and celiac disease. The present
CC sequence represents a mutated MOG-Fc construct, which is used in an
CC example from the present invention.
XX
XX Sequence 388 AA;
SQ
Query Match 100.0%; Score 1263; DB 5; Length 388;
Best Local Similarity 100.0%; Pred. No. 2.8e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 157 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 216
QY 61 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 217 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 276
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
DB 277 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 336
QY 181 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232
DB 337 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 388
RESULT 68
ADA14265
ID ADA14265 standard; protein; 388 AA.
XX
XX ADA14265;
XX
XX 06-NOV-2003 (first entry)
XX
XX Human immunoglobulin G1 (IgG1) protein SEQ ID NO:4.
XX
XX polypeptide construct; autoreactive antigen; immunoglobulin receptor;
KW Ig receptor; autoreactive B-cell; autoimmune disease; immunosuppressive;
KW neuroprotective; dermatological; antiarthritic; antithyroid;
KW antidiabetic; hepatotropic; gene therapy; pemphigus vulgaris;
KW Bullous pemphigoid; Goodpasture's syndrome;
KW autoimmune haemolytic anaemia; AIHA; rheumatoid arthritis;
KW Systemic lupus erythematosus; Grave's disease;
KW autoimmune hyperthyroidism; contact dermatitis; Myasthenia gravis;
KW Juvenile diabetes; Sjogren's syndrome; autoimmune thyroiditis;
KW primary hypoadrenalism; Addison's disease; multiple sclerosis;
KW thrombocytopenic purpura; pemphigus fallacious; linear IgA dermatosis;
KW celiac disease; human; IgG1.
XX
XX Homo sapiens.
XX
XX WO2003068822-A2.

```

XX PD 21-AUG-2003.  
 XX DT  
 XX PF 12-FEB-2003; 2003WO-EP001389.  
 XX PR 13-FEB-2002; 2002EP-00003332.  
 XX KW (MICR-) MICROMET AG.  
 XX PA  
 XX PI Zoher M, Dreier T, Baeuerle P;  
 XX DR WPI; 2003-663797/62.  
 XX DR N-PSDB; ADA14264.  
 XX  
 PT New polypeptide construct, useful for preparing a composition for  
 PT treating or preventing autoimmune diseases e.g. rheumatoid arthritis,  
 PT contact dermatitis or multiple sclerosis.  
 XX  
 XX Example 3; Page 131-133; 141pp; English.  
 XX  
 CC The present invention describes a polypeptide construct (I) comprising at  
 CC least two domains or two sets of domains. The domain comprises a de-  
 CC immunised, autoreactive antigen or its fragment that is specifically  
 CC recognised by the immunoglobulin (Ig) receptors of autoreactive B-cells.  
 CC A further domain comprises an effector molecule capable of interacting  
 CC with or activating NK-cells, T-cells, macrophages, monocytes or  
 CC granulocytes or capable of activating the complement system. Also  
 CC described: (1) a polynucleotide encoding (I); (2) a vector comprising the  
 CC polynucleotide of (1); (3) a host transformed with the vector of (2); (4)  
 CC a composition comprising (I), polynucleotide of (1), vector of (2) or  
 CC host of (3); and (5) treating or preventing autoimmune disease. (I) has  
 CC immunosuppressive, neuroprotective, dermatological, antiarthritic,  
 CC antithyroid, antidiabetic and hepatotropic activities, and can be used in  
 CC gene therapy. The polypeptide construct is useful for preparing a  
 CC composition for treating or preventing autoimmune diseases comprising  
 CC pemphigus vulgaris, Bullous pemphigoid, Goodpasture's syndrome,  
 CC autoimmune haemolytic anaemia (AIHA), rheumatoid arthritis, Systemic  
 CC lupus erythematosus, Grave's disease (autoimmune hyperthyroidism),  
 CC contact dermatitis, Myasthenia gravis, juvenile diabetes, Sjogren's  
 CC syndrome, autoimmune thyroiditis, primary hypoadrenalism (Addison's  
 CC disease), multiple sclerosis, thrombocytopenic purpura, pemphigus  
 CC fallacious, linear IGA dermatosis and celiac disease. The present  
 CC sequence represents a human immunoglobulin G1 (IgG1) protein, which is  
 CC used in an example from the present invention.  
 XX  
 SQ Sequence 388 AA;

Query Match 100.0%; Score 1263; DB 6; Length 388;  
 Best Local Similarity 100.0%; Pred. No. 2.8e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPPELGGPSVFLPDKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 157 EPKSCDKTHCTCPPELGGPSVFLPDKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 216  
 QY 61 NWYVDGVEVHNATKPREQYNSTYRVSVLTVLDHQLNGKEYCKVSNKALPAPIEKT 120  
 DB 217 NWYVDGVEVHNATKPREQYNSTYRVSVLTVLDHQLNGKEYCKVSNKALPAPIEKT 276  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180  
 DB 277 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 336  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVNHEALHNHYTQKSLSLSPGK 232  
 DB 337 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVNHEALHNHYTQKSLSLSPGK 388

RESULT 69  
 AAW18574  
 ID AAW18574 standard; protein; 396 AA.  
 XX  
 AC AAW18574;

XX 27-AUG-2003 (revised)  
 DT 17-SEP-1997 (first entry)  
 XX  
 XX Aggrecanase artificial recombinant substrate rAGG-1.  
 XX  
 KW Artificial recombinant substrate; rAGG1; aggrecanase; aggrecan;  
 KW osteoarthritis; diagnosis.  
 XX  
 OS Homo sapiens.  
 OS Chinaeric.  
 OS Chimeric.  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT Peptide 1..24  
 FT /label= Sig\_peptide  
 FT /note= "CD5 signal sequence"  
 FT Peptide 25..32  
 FT /label= FLAG  
 FT Domain 33..160  
 FT /label= Aggrecan  
 FT /note= "human aggrecan interglobular domain"  
 FT Peptide 161..164  
 FT /label= Spacer  
 FT Region 165..179  
 FT /label= Hinge  
 FT /note= "human IgG1 hinge region"  
 FT Region 180..289  
 FT /label= CH2  
 FT /note= "human IgG1 CH2 region"  
 FT Region 290..396  
 FT /label= CH3  
 FT /note= "human IgG1 CH3 region"  
 XX EP785274-A1.  
 XX 23-JUL-1997.  
 PD  
 PF 27-DEC-1996; 96EP-00120949.  
 XX 18-JAN-1996; 96EP-00100682.  
 PR  
 XX (FARH ) HOECHST AG.  
 PA  
 XX Bartnik E, Eidenmuller B, Buettner F, Caterson B, Hughes C;  
 PI  
 XX WPI; 1997-365948/34.  
 DR N-PSDB; AAT69892.  
 XX  
 PT Recombinant substrate for aggrecanase in vitro testing - and encoding  
 PT DNA, useful for studying aggrecanase activity e.g. by detection of  
 PT cleavage products for monitoring onset or progression of osteoarthritis.  
 XX  
 PS Claim 3; Page 15-16; 28pp; English.  
 XX  
 CC An artificial recombinant substrate, rAGG-1 (AAW18574), for aggrecanase  
 CC comprises the CD5 signal sequence, a FLAG epitope for M1 monoclonal  
 CC antibody detection, the interglobular domain of human aggrecan, and human  
 CC IgG1 hinge, CH2 and CH3 regions. It is the expression product of a DNA  
 CC molecule (AAT69892) that can be incorporated into a vector for use in  
 CC rAGG-1 prodn. in host cells. rAGG-1 can be used in cell culture systems  
 CC to study the activity of aggrecanase, to detect new enzymatic cleavage  
 CC sites, for the affinity purification of aggrecanase, to isolate  
 CC aggrecanase cDNA by functional cloning, to screen for aggrecanase  
 CC inhibitors, in methods for monitoring the onset or progression of  
 CC osteoarthritis, and in diagnostic aids. Another rAGG-1 (AAW18575) has  
 CC alanine at amino acid position 34. (Updated on 27-AUG-2003 to correct OS  
 CC field.)  
 XX  
 SQ Sequence 396 AA;

Query Match 100.0%; Score 1263; DB 2; Length 396;

Best Local Similarity 100.0%; Pred. No. 2.9e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 165 EPKSCDKTHTCCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 224

QY 61 NWYVDGVEVHNKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 225 NWYVDGVEVHNKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 284

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 285 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 344

QY 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
Db 345 PVLDSGDSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 396

RESULT 70  
AAW18575  
ID AAW18575 standard; protein; 396 AA.  
XX AAW18575;  
AC AC  
XX 27-AUG-2003 (revised)  
DT 17-SEP-1997 (first entry)  
XX Aggrecanase artificial recombinant substrate rAGG-1.  
DE Artificial recombinant substrate; rAGG1; aggrecanase; aggrecan;  
XX osteoarthritis; diagnosis.  
KW Homo sapiens.  
XX Chimeric.  
OS Synthetic.  
XX Key Location/Qualifiers  
FT Peptide 1..24  
FT /label= Sig\_peptide  
FT /note= "CD5 signal sequence"  
FT Peptide 25..32  
FT /label= FLAG  
FT Domain 33..160  
FT /label= Aggrecan  
FT /note= "human aggrecan interglobular domain"  
FT Peptide 161..164  
FT /label= Spacer  
FT Region 165..179  
FT /label= Hinge  
FT /note= "human IgG1 hinge region"  
FT Region 180..289  
FT /label= CH2  
FT /note= "human IgG1 CH2 region"  
FT Region 290..396  
FT /label= CH3  
FT /note= "human IgG1 CH3 region"  
XX EF785274-A1.  
PN XX  
XX 23-JUL-1997.  
XX XX  
XX 27-DEC-1996; 96EP-00120949.  
XX XX  
XX 18-JAN-1996; 96EP-00100682.  
XX (FARH ) HOECHST AG.  
XX Bartnik E, Eidenmueller B, Buettner F, Caterson B, Hughes C;  
PI WPI; 1997-365948/34.  
XX DR

DR N-PSDB; AAT69893.  
XX Recombinant substrate for aggrecanase in vitro testing - and encoding  
FT DNA, useful for studying aggrecanase activity e.g. by detection of  
FT cleavage products for monitoring onset or progression of osteoarthritis.  
XX  
PS Claim 3; Page 15-16; 28pp; English.  
XX  
CC An artificial recombinant substrate, rAGG-1 (AAW18575), for aggrecanase  
CC comprises the CD5 signal sequence, a FLAG epitope for M1 monoclonal  
CC antibody detection, the interglobular domain of human aggrecan, and human  
CC IgG1 hinge, CH2 and CH3 regions. It is the expression product of a DNA  
CC molecule (AAT69893) that can be incorporated into a vector for use in  
CC rAGG-1 prodn. in host cells. rAGG-1 can be used in cell culture systems  
CC to study the activity of aggrecanase, to detect new enzymatic cleavage  
CC sites, for the affinity purification of aggrecanase, to isolate  
CC aggrecanase cDNA by functional cloning, to screen for aggrecanase  
CC inhibitors, in methods for monitoring the onset or progression of  
CC osteoarthritis, and in diagnostic aids. Another rAGG-1 (AAW18574) has  
CC glycine at amino acid position 34. (Updated on 27-AUG-2003 to correct OS  
CC field.)  
XX  
SQ Sequence 396 AA;  
Query Match 100.0%; Score 1263; DB 2; Length 396;  
Best Local Similarity 100.0%; Pred. No. 2.9e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 165 EPKSCDKTHTCCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 224

QY 61 NWYVDGVEVHNKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 225 NWYVDGVEVHNKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 284

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 285 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 344

QY 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
Db 345 PVLDSGDSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 396

RESULT 71  
ADF57557  
ID ADF57557 standard; protein; 396 AA.  
XX ADF57557;  
AC ADF57557;  
XX  
DT 12-FEB-2004 (first entry)  
XX Mouse ymkz5-human Fc fusion protein.  
DE Transmembrane decoy receptor; ymkz5; tumour necrosis factor; TNF; tumour;  
KW cancer; acquired immune deficiency syndrome; AIDS; anaemia;  
KW autoimmune disease; cachexia; leprosy; leukaemia; hepatitis;  
KW multiple sclerosis; myocardial ischaemia; obesity; gene therapy; mouse;  
KW receptor; human.  
XX Chimeric.  
OS Mus musculus.  
OS Homo sapiens.  
XX US2003096355-A1.  
PN 22-MAY-2003.  
PD 11-JUL-2002; 2002US-00193616.  
XX 09-JUL-1999; 99US-0143137P.  
XX 07-JUL-2000; 2000US-00611989.  
PR

XX PA (ZHAN/) ZHANG K.  
 XX PI Zhang K;  
 XX XX WPI; 2004-008943/01.  
 XX XX Novel ymkz5-receptor polypeptide useful for treating diseases such as  
 PT tumor, cancer, AIDS, anemia, autoimmune diseases, cachexia, leprosy,  
 PT leukemia, hepatitis, multiple sclerosis.  
 XX XX Example 4; SEQ ID NO 14; 57pp; English.  
 XX XX The invention relates to transmembrane decoy receptor, ymkz5 belonging to  
 CC tumour necrosis factor (TNF) receptor supergene family and nucleic acid  
 CC sequences encoding such receptors. The invention is useful for detecting  
 CC diseases or susceptibility to diseases related to the presence of mutated  
 CC ymkz5-receptor gene such as tumours or cancers. The sequences of the  
 CC invention are used as medication for a number of diseases such as  
 CC acquired immune deficiency syndrome (AIDS), anaemia, autoimmune diseases,  
 CC cachexia, leprosy, leukaemia, hepatitis, multiple sclerosis, myocardial  
 CC ischaemia, obesity etc. The invention is also useful in gene therapy. The  
 CC present sequence is mouse ymkz5-human Fc fusion protein.  
 XX XX Sequence 396 AA;  
 SQ

Query Match 100.0%; Score 1263; DB 8; Length 396;  
 Best Local Similarity 100.0%; Pred. No. 2.9e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 165 EPKSCDKHTCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 224  
 QY 61 NWYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 225 NWYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 284  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
 DB 285 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 344  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 345 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 396

RESULT 72  
 AAY15123  
 ID AAY15123 standard; protein; 400 AA.  
 XX AC AAY15123;  
 XX DT 07-FEB-2000 (first entry)  
 XX DE Porcine CTLA-4-Ig construct.  
 XX KW Porcine CTLA-4; soluble protein; xenograft; organ transplant; B7; CD28;  
 KW xenograft-specific immunosuppression; recipient T-cell; anergy;  
 KW co-stimulatory signal 2; homology; human CTLA-4; bovine CTLA-4.  
 XX OS Sus scrofa.  
 XX OS Homo sapiens.  
 FH Key Location/Qualifiers  
 FT Region 162..168  
 FT /label= Flexible linker  
 FT /note= "Denotes the junction between pCTLA-4"  
 FT Domain 169..362  
 FT /label= IgG1 domain  
 XX WO9957266-A2.  
 XX PN

PD 11-NOV-1999.  
 XX 30-APR-1999; 99WO-GB001350.  
 XX 30-APR-1998; 98GB-00009280.  
 XX (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.  
 XX Lechler IR, Dorling A;  
 XX WPI; 2000-038815/03.  
 XX Inhibiting T-cell mediated rejection of xenotransplanted organs.  
 XX Claim 1; Fig 4; 43pp; English.  
 XX The present sequence is porcine CTLA-4-Ig construct for xenograft -  
 CC specific immunosuppression. In a pig-to-human transplantation, the  
 CC soluble protein could comprise the extracellular domain of porcine CTLA-4  
 CC fused to a human C gamma 1 chain of IgG1. This construct was subcloned  
 CC into the expression vector pHOOK-3TM and used to transfect DAP.3 or CHO-  
 CC K1 cells. pCTLA-4-Ig preferentially binds to porcine B7 and blocks its  
 CC interaction with CD28 on recipient T-cells. This is useful as a species-  
 CC specific reagent to inhibit human T-cell proliferative responses to a  
 CC variety of stimulators  
 XX XX Sequence 400 AA;  
 SQ

Query Match 100.0%; Score 1263; DB 3; Length 400;  
 Best Local Similarity 100.0%; Pred. No. 2.9e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 169 EPKSCDKHTCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 228  
 QY 61 NWYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 229 NWYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 288  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
 DB 289 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 348  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 349 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 400

RESULT 73  
 AAU97108  
 ID AAU97108 standard; protein; 404 AA.  
 XX AC AAU97108;  
 XX DT 13-AUG-2002 (first entry)  
 XX DE Mouse MK61-human IgG Fc (mMK61-Fc) fusion protein.  
 XX KW Mouse; tumour necrosis factor receptor-like; TNF-like; B-cell; T-cell;  
 KW lymphoproliferative disorder; autoimmune disorder; inflammatory disease;  
 KW leukocyte; osteoclast proliferation; apoptosis; cancer; cachexia;  
 KW anorexia; coronary condition; depression; diabetes mellitus; pain;  
 KW endometriosis; epilepsy; lung disease; ocular disease; pancreatitis;  
 KW dermatomyositis; tissue transplantation; infection; human; mMK61-Fc;  
 KW mutant; mutein; IgG.  
 XX OS Mus musculus.  
 XX OS Homo sapiens.  
 XX OS Synthetic.  
 XX OS Chimeric.  
 XX WO200220762-A2.  
 XX PN

XX PD 14-MAR-2002.  
 XX PF 05-SEP-2001; 2001WO-US027631.  
 XX PR 05-SEP-2000; 2000US-0230191P.  
 XX PA (AMGE-) AMGEN INC.  
 XX PI Theill LE, Yeh R, Silbiger SM, Yu G, Senaldi G;  
 XX DR WPI; 2002-371878/40.  
 XX DR N-PSDB; ABK30607.  
 XX PT Novel tumor necrosis factor receptor-like polypeptides, polynucleotides  
 XX PT useful for diagnosing and treating associated diseases such as cancer,  
 XX PT myocardial infarction, diabetes, endometriosis, stroke and asthma.  
 XX PS Claim 15; Fig 8; 257pp; English.  
 XX CC The present invention relates to the isolation of novel tumour necrosis  
 XX CC factor receptor (TNFR)-like polypeptides, termed MK61, and the  
 XX CC polynucleotide sequences encoding them. The MK61 polypeptides are useful  
 XX CC for treating, preventing or ameliorating a medical condition in a mammal  
 XX CC resulting from abnormal levels of MK61 polypeptide. Such disorders  
 XX CC include B- or T-cell lymphoproliferative disorders (e.g. leukaemia, non-  
 XX CC Hodgkins lymphoma), autoimmune disorders (e.g. rheumatoid arthritis,  
 XX CC systemic lupus erythematosus (SLE), Crohn's disease), and inflammatory  
 XX CC diseases (e.g. sepsis, intestinal bowel disease). They can also be used  
 XX CC to prevent and treat disorders or conditions including leukocyte and/or  
 XX CC osteoclast proliferation, differentiation, survival, and/or apoptosis,  
 XX CC and in regulating growth, survival and/or apoptosis of lymphoma,  
 XX CC leukaemia and other cancer cells, acute and chronic TNF-associated  
 XX CC conditions including cachexia/anorexia, chronic fatigue syndrome, coronary  
 XX CC restenosis, myocardial infarction, depression, diabetes mellitus,  
 XX CC endometriosis, analgesia, graft versus host rejection, diarrhoea, trauma,  
 XX CC epilepsy, haemorrhage, stroke, lung disease including asthma, pulmonary  
 XX CC fibrosis, ocular disease, pain, pancreatitis, reperfusion injury,  
 XX CC dermatomyositis, tissue transplantation, and infections (e.g. human  
 XX CC immunodeficiency virus (HIV)). The present sequence represents mouse MK61  
 XX CC -human IgG Fc (mMK61-Fc) fusion protein  
 XX SQ Sequence 404 AA;  
 Query Match 100.0%; Score 1263; DB 5; Length 404;  
 Best Local Similarity 100.0%; Pred. No. 2.9e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 162 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 221  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 120  
 DB 222 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 281  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180  
 DB 282 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 341  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 342 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 393  
 RESULT 74  
 AAB28693  
 ID AAB28693 standard; protein; 423 AA.  
 XX AAB28693;  
 AC AAB28693;  
 XX 14-FEB-2001 (first entry)

XX FC-huAGP-1 (114-281) fusion protein.  
 DE Human; AGP-1; type II transmembrane protein; cytostatic; antiviral;  
 KW antiinflammatory; hepatotropic; antiarteriosclerotic; anti-HIV; HIV;  
 KW human immunodeficiency virus; apoptosis; proliferative disorder; cancer;  
 KW hepatitis; acquired immunodeficiency syndrome; AIDS; autoimmune disorder;  
 KW transplant rejection; cardiovascular disease; arteriosclerosis;  
 KW FC-huAGP-1; fusion protein.  
 XX Homo sapiens.  
 XX WO200063253-A1.  
 XX PD 26-OCT-2000.  
 XX PF 24-MAR-2000; 2000WO-US008004.  
 XX PR 16-APR-1999; 99US-00293245.  
 XX PA (AMGE-) AMGEN INC.  
 XX PI Hsu H, Meng S;  
 XX DR WPI; 2000-665240/64.  
 XX DR N-PSDB; AAC67833.  
 XX PT Fusion protein of AGP-1 protein and an Fc region, used to treat  
 XX PT proliferative disorders, immune disorders, and virally-induced disorders.  
 XX PS Disclosure; Fig 4; 93pp; English.  
 XX CC The present sequence is an AGP-1 fusion protein. AGP-1 is a type II  
 XX CC transmembrane protein. The fusion proteins comprise an Fc immunoglobulin  
 XX CC region fused to the N-terminal portion of the AGP-1 protein. The fusion  
 XX CC proteins can be used to induce apoptosis in a tissue, and to treat  
 XX CC proliferative disorders, immune disorders, or virally-induced disorders.  
 XX CC The proliferative disorders include cancers, such as breast, prostate,  
 XX CC lung or colon cancer. The viral infections include hepatitis, and  
 XX CC acquired immunodeficiency syndrome (AIDS), and the immune disorders may  
 XX CC be autoimmune disorders or transplant rejection. Cardiovascular diseases  
 XX CC such as arteriosclerosis may also be treated. The AGP-1 containing fusion  
 XX CC proteins have increased biological activity compared to the soluble AGP-1  
 XX CC proteins used in prior art therapies  
 XX SQ Sequence 423 AA;  
 Query Match 100.0%; Score 1263; DB 3; Length 423;  
 Best Local Similarity 100.0%; Pred. No. 3.1e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 24 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 83  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 120  
 DB 84 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 143  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180  
 DB 144 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 203  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 204 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 255  
 RESULT 75  
 AAW14765  
 ID AAW14765 standard; protein; 424 AA.  
 XX AAW14765;  
 AC AAW14765;

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XX 11-JUN-1997 (first entry)
XX Human soluble kit ligand-IgG fusion protein (corrected).
XX
XX Kit ligand; c-kit proto-oncogene; cytokine; growth factor;
XX haematopoietic cell; cell proliferation; stem cell; anaemia;
XX thrombocytopaenia; therapy; IgG1.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Peptide 1. .25
XX /label= Sig_peptide
XX /note= "KL signal peptide"
XX Protein 26. .424
XX /label= Mat_protein
XX /note= "human KL-IgG fusion"
XX
XX WO9526199-A1.
XX
XX 05-OCT-1995.
XX
XX 28-MAR-1995; 95WO-US003866.
XX
XX 28-MAR-1994; 94US-00220379.
XX
XX (CYTO-) CYTOMED INC.
XX
XX Nocka KH, Lobell RB;
XX
XX WPI; 1995-351198/45.
XX N-PSDB; AAT63110.
XX
XX Covalent dimers of kit ligand or FLT-3/FLK-2 ligand - exhibit increased
XX activity in promoting cell proliferation.
XX
XX Claim 10; Page 46-48; 88pp; English.
XX
XX A fusion protein (AAW14765) between human soluble kit ligand (KL) (see
XX also AAW14761) and a human IgG1 heavy chain can be transiently expressed
XX in COS cells transfected with a human KL-Ig cDNA construct (AAT63110) in
XX vector CDM8. KL-Ig can also be produced as a dimer stabilised by
XX intermolecular disulphide bonds or a peptide linker. The stabilised KL-Ig
XX dimers have a more favorable cell proliferation:mast cell activation
XX ratio than native KL and can stimulate haematopoietic recovery or stem
XX cell/progenitor cell mobilisation with less toxicity
XX
XX Sequence 424 AA;
XX
XX Query Match 100.0%; Score 1263; DB 2; Length 424;
XX Best Local Similarity 100.0%; Pred. No. 3.1e-91;
XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 EPKSCDKHTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 193 EPKSCDKHTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 252
QY 61 NWTVDGVVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
DB 253 NWTVDGVVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 312
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180
DB 313 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 372
QY 181 PVLDSGGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
DB 373 PVLDSGGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 424
XX
XX RESULT 76
XX AAW14764

```

```

ID AAW14764 standard; protein; 424 AA.
XX
XX AAW14764;
XX
XX 11-JUN-1997 (first entry)
XX
XX Human soluble kit ligand-IgG fusion protein.
XX
XX kit ligand; c-kit proto-oncogene; cytokine; growth factor;
XX haematopoietic cell; cell proliferation; stem cell; anaemia;
XX thrombocytopaenia; therapy; IgG1.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Peptide 1. .25
XX /label= Sig_peptide
XX /note= "KL signal peptide"
XX Protein 26. .424
XX /label= Mat_protein
XX /note= "human KL-IgG fusion"
XX
XX WO9526199-A1.
XX
XX 05-OCT-1995.
XX
XX 28-MAR-1995; 95WO-US003866.
XX
XX 28-MAR-1994; 94US-00220379.
XX
XX (CYTO-) CYTOMED INC.
XX
XX Nocka KH, Lobell RB;
XX
XX WPI; 1995-351198/45.
XX N-PSDB; AAT63109.
XX
XX Covalent dimers of kit ligand or FLT-3/FLK-2 ligand - exhibit increased
XX activity in promoting cell proliferation.
XX
XX Claim 10; Page 43-44; 88pp; English.
XX
XX A fusion protein (AAW14764) between human soluble kit ligand (KL) (see
XX also AAW14761) and a human IgG1 heavy chain can be transiently expressed
XX in COS cells transfected with a human KL-Ig cDNA construct (AAT63109) in
XX vector CDM8; a corrected KL-Ig construct (AAW14765) has also been prepd.
XX KL-Ig can also be produced as a dimer stabilised by intermolecular
XX disulphide bonds or a peptide linker. The stabilised KL-Ig dimers have a
XX more favorable cell proliferation:mast cell activation ratio than native
XX KL and can stimulate haematopoietic recovery or stem cell/progenitor cell
XX mobilisation with less toxicity
XX
XX Sequence 424 AA;
XX
XX Query Match 100.0%; Score 1263; DB 2; Length 424;
XX Best Local Similarity 100.0%; Pred. No. 3.1e-91;
XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 EPKSCDKHTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 193 EPKSCDKHTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 252
QY 61 NWTVDGVVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
DB 253 NWTVDGVVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 312
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180
DB 313 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 372
QY 181 PVLDSGGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
DB 373 PVLDSGGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 424

```

```
RESULT 77
AAB28695
ID AAB28695 standard; protein; 426 AA.
XX AC
XX AAB28695;
XX DT
XX 14-FEB-2001 (first entry)
XX DE
XX FC-muAGP-1 (120-291) fusion protein.
XX KW
XX Mouse; AGP-1; type II transmembrane protein; cytostatic; antiviral;
XX KW antiinflammatory; hepatotropic; antiarteriosclerotic; anti-HIV; HIV;
XX KW human immunodeficiency virus; apoptosis; proliferative disorder; cancer;
XX KW hepatitis; acquired immunodeficiency syndrome; AIDS; autoimmune disorder;
XX KW transplant rejection; cardiovascular disease; arteriosclerosis;
XX KW FC-muAGP-1; fusion protein.
XX OS
XX Mus sp.
XX PN
XX W0200063253-A1.
XX PD
XX 26-OCT-2000.
XX PF
XX 24-MAR-2000; 2000WO-US008004.
XX PR
XX 16-APR-1999; 99US-00293245.
XX PA
XX (AMGE-) AMGEN INC.
XX PI
XX Hsu H, Meng S;
XX PI
XX WPI: 2000-665240/64.
XX DR
XX N-PSDB; AAC67835.
XX XX
XX Fusion protein of AGP-1 protein and an Fc region, used to treat
XX proliferative disorders, immune disorders, and virally-induced disorders.
XX PS
XX Disclosure; Fig 6; 93pp; English.
XX CC
XX The present sequence is part of an AGP-1 fusion protein. AGP-1 is a type
XX II transmembrane protein. The fusion proteins comprise an Fc
XX immunoglobulin region fused to the N-terminal portion of the AGP-1
XX protein. The fusion proteins can be used to induce apoptosis in a tissue,
XX and to treat proliferative disorders, immune disorders, or virally-
XX induced disorders. The proliferative disorders include cancers, such as
XX breast, prostate, lung or colon cancer. The viral infections include
XX hepatitis, and acquired immunodeficiency syndrome (AIDS), and the immune
XX disorders may be autoimmune disorders or transplant rejection.
XX CC Cardiovascular diseases such as arteriosclerosis may also be treated. The
XX AGP-1 containing fusion proteins have increased biological activity
XX compared to the soluble AGP-1 proteins used in prior art therapies
XX SQ
XX Sequence 426 AA;
Query Match 100.0%; Score 1263; DB 3; Length 426;
Best Local Similarity 100.0%; Pred No. 3.1e-91; Indels 0; Gaps 0;
Matches 232; Conservative 0; Mismatches 0;
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 24 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 83
QY 61 NWYDGVGVHNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 84 NWYDGVGVHNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 143
QY 121 ISKAKQPREPQVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 180
DB 144 ISKAKQPREPQVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP 203
QY 181 PVLDSGSPFLYSKLTIVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPGK 232

Db 204 PVLDSGSPFLYSKLTIVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPGK 255

RESULT 78
AAR26530
ID AAR26530 standard; protein; 435 AA.
XX AC
XX AAR26530;
XX DT
XX 25-MAR-2003 (revised)
XX 28-JAN-1993 (first entry)
XX DE
XX Sequence of one chain of a CD4-gamma 1 chimeric heavy chain homodimer.
XX KW
XX CD4-gamma 1 chimeric heavy chain homodimer; expression vector; HIV;
XX KW therapy; diagnostic agent; inhibition.
XX OS
XX Synthetic.
XX FH
XX Key
XX Region
XX Location/Qualifiers
XX 1..204
XX /label= CD4
XX /note= "1. .25 = preregion"
XX Region
XX 205..219
XX /label= hinge
XX Region
XX 220..329
XX /label= CH2
XX Region
XX 330..436
XX /label= CH3
XX PN
XX W09213559-A1.
XX XX
XX 20-AUG-1992.
XX PF
XX 10-FEB-1992; 92WO-US001152.
XX PR
XX 08-FEB-1991; 91US-00654205.
XX PA
XX (PROG-) PROGENICS PHARM INC.
XX PI
XX Beaudry GA, Maddon PJ;
XX DR
XX WPI: 1992-299758/36.
XX DR
XX N-PSDB; AAQ27830.
XX XX
XX CD4-gamma 1 chimeric heavy chain homo-dimer and its expression vector -
XX for preventing and treating HIV infection useful as a diagnostic agent.
XX PS
XX Example; Fig 3; 88pp; English.
XX CC
XX Human CD4 cDNA was excised from pSP6T4 and cloned into M13mpl8. The 2 kb
XX PstI/PstI fragment from pBR lambda 1 contg. the human lambda 1 heavy
XX chain gene (contg. the hinge, CH2 and CH3 exons) was isolated and cloned
XX into the BAP-treated M13mpl8/CD4 vector. To obtain a CD4-lambda 1
XX chimeric heavy chain gene, oligonucleotide-mediated site-directed
XX mutagenesis was performed to juxtapose the CD4 and lambda 1 heavy chain
XX DNA sequences, ligating the CD4 sequence in frame to the hinge exon. The
XX DNA was then cloned into pCDNA-1 to produce CD4-IgG1-pcDNA1 (ATCC 40951).
XX (Updated on 25-MAR-2003 to correct PN field.)
XX SQ
XX Sequence 435 AA;
Query Match 100.0%; Score 1263; DB 2; Length 435;
Best Local Similarity 100.0%; Pred. No. 3.2e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 204 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 263
QY 61 NWYDGVGVHNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
```

Db 264 NNYVDGVEVHNAKTPREBQYNSTYRVSVLTVLHODWLNKGKEYKCKVSNKALPAPIEKT 323  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 324 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 383  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
Db 384 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 435

RESULT 79  
AAW10552  
ID AAW10552 standard; protein; 437 AA.  
XX  
AC AAW10552;  
XX  
DT 22-APR-1997 (first entry)  
XX  
DE Alpha-1-acid glycoprotein-IgG1 fusion protein.  
XX  
KW IgG1; alpha-1-acid glycoprotein; AGP; sialyl-Lewis X; inflammation;  
KW extravasation-dependent adverse reaction; organ damage; clotting;  
KW adult respiratory distress syndrome; glomerular nephritis;  
KW ischaemic myocardial injury; immune reaction; septic shock; septicemia;  
KW therapy; diagnosis.  
XX  
OS Homo sapiens.  
XX  
PN WO9700079-A1.  
XX  
PD 03-JAN-1997.  
XX  
PF 11-JUN-1996; 96WO-US010043.  
XX  
PR 14-JUN-1995; 95US-0000213P.  
XX  
PA (GEO ) GEN HOSPITAL CORP.  
XX  
PI Seed B, Pouyani T;  
XX  
XX WPI; 1997-077356/07.  
DR N-PSDB; AAT60740.  
XX  
XX P-selectin and opt. E-selectin binding organic mol. - having sialyl-Le(x)  
PT and sulphated determinant, useful for protecting against inflammatory or  
PT immune reactions.  
XX  
XX Disclosure; Page 44-45; 81pp; English.  
XX  
XX A fusion protein (AAW10552) is composed of human acute phase alpha-1-acid  
CC glycoprotein (AGP) and the constant domains of human IgG1. It is  
CC expressed in host cells utilising a DNA construct (AAT60740) obtd. by  
CC inserting alpha-1-AGP cDNA into an expression cassette contg. the IgG1  
CC hinge-CH2-CH3 sequences. Sialyl-Le(x) addition sites may be introduced  
CC into the antibody fusion protein e.g. by appending a P-selectin ligand  
CC (see also AAW10530-32). The sialyl-Le(x) sites interfere with the  
CC antibody's ability to fix complement or bind an Fc receptor. Expression  
CC in fucosyltransferase-expressing host cells allows prodn. of soluble  
CC antibody fusion proteins. These have therapeutic applns., e.g. in  
CC minimising inflammation and decreasing extravasation-dependent organ  
CC damage and/or clotting  
XX  
SQ Sequence 437 AA;

Query Match 100.0%; Score 1263; DB 2; Length 437;  
Best Local Similarity 100.0%; Pred. No. 3.2e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 206 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 265

QY 61 NNYVDGVEVHNAKTPREBQYNSTYRVSVLTVLHODWLNKGKEYKCKVSNKALPAPIEKT 120  
Db 266 NNYVDGVEVHNAKTPREBQYNSTYRVSVLTVLHODWLNKGKEYKCKVSNKALPAPIEKT 325  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 326 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 385  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
Db 386 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 437

RESULT 80  
ABJ37104  
ID ABJ37104 standard; protein; 437 AA.  
XX  
AC ABJ37104;  
XX  
DT 08-MAY-2003 (first entry)  
XX  
DE Concatameric immunoadhesion human protein sequence SEQ ID No 14.  
XX  
KW Antinflammatory; antibacterial; immunosuppressive; antirheumatic;  
KW antiarthritic; immunomodulator; concatameric protein; soluble domain;  
KW dimeric protein; inflammation; septicemia; cytotoxicity;  
KW rheumatoid arthritis; cachexia; inflammation; human.  
XX  
OS Homo sapiens.  
XX  
PN WO2003010202-A1.  
XX  
PD 06-FEB-2003.  
XX  
PF 26-JUL-2002; 2002WO-KR001427.  
XX  
PR 26-JUL-2001; 2001KR-00045028.  
XX  
PA (MEDE-) MEDEXGEN CO LTD.  
XX  
PI Chung Y, Han J, Lee H, Choi E, Kim J;  
XX  
XX WPI; 2003-229639/22.  
DR N-PSDB; ABT32047.  
XX  
XX New concatameric protein having two soluble domains, useful for  
PT diagnosing and treating disorders associated with the dimeric protein or  
PT its glycosylated form, such as inflammation, septicemia, rheumatoid  
PT arthritis and cachexia.  
XX  
XX Disclosure; Page 156-158; 211pp; English.  
XX  
XX The invention relates to a novel concatameric protein comprising two  
CC soluble domains, in which an N-terminus of a soluble domain of a  
CC biologically active protein is linked to a C-terminus of an identical  
CC soluble domain or a different soluble domain of a biologically active  
CC protein. The methods and compositions of the present invention are useful  
CC for the diagnosis and treatment of disorders associated with dimeric  
CC protein or its glycosylated form, such as inflammation, septicemia,  
CC cytotoxicity, rheumatoid arthritis, cachexia and other inflammation-  
CC related diseases. This sequence represents the human concatameric protein  
CC of the invention  
XX  
SQ Sequence 437 AA;

Query Match 100.0%; Score 1263; DB 6; Length 437;  
Best Local Similarity 100.0%; Pred. No. 3.2e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 206 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 265

QY 61 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDMLNGKEYKCKVSNKALPAPIEKT 120  
 |||||  
 Db 266 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDMLNGKEYKCKVSNKALPAPIEKT 325  
 |||||  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 |||||  
 Db 326 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 385  
 |||||  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSVCSVMHEALHNHYTOKSLSLSPGK 232  
 |||||  
 Db 386 PVLDSGSGFFLYSKLTVDKSRWQGNVFSVCSVMHEALHNHYTOKSLSLSPGK 437  
 |||||

## RESULT 81

ADQ79912  
 ID ADQ79912 standard; protein; 437 AA.

XX AC ADQ79912;

XX DT 09-SEP-2004 (first entry)

XX DE Human CD2/Ig construct.

XX KW Human; tumour necrosis factor receptor; TNFR1; TNFR2; CTLA4; CD2; IgG;  
 KW immunoglobulin; concatameric fused dimer protein; immunoadhesin;  
 KW FC fragment; hinge.

XX OS Homo sapiens.

XX OS Synthetic.

XX KR2004009997-A.

XX PN 31-JAN-2004.

XX PD 26-JUL-2002; 2002KR-00045921.

XX PF 26-JUL-2002; 2002KR-00045921.

XX PR (MEDE-) MEDEXGEN INC.

XX PA Choi EY, Han JU, Jung YH, Kim JM, Lee HJ;

XX PI WPI; 2004-458871/43.

XX DR N-PSDB; ADQ79911.

XX XX Concatameric immunoadhesin.

XX XX Example 2; SEQ ID NO 14; 129pp; Korean.

XX CC The invention relates to a concatameric fused dimer protein and  
 CC glycosylation modification protein providing concatameric immunoadhesin  
 CC with improved efficacy and stability. The concatameric protein is  
 CC characteristically formed by binding C-terminal of one biologically  
 CC active protein with N-terminal of same or different biologically active  
 CC protein, e.g. tumour necrosis factor receptors (TNFR1 and TNFR2), CD2 and  
 CC CTLA4. Two monomer proteins which are formed by fusing the extracellular  
 CC region of a protein participating in the same immune reaction to an  
 CC immunoglobulin Fc fragment, bound together at a hinge region by  
 CC disulphide bond to give the concatameric fused dimer protein, wherein the  
 CC immunoglobulin is IgG. The present sequence represents a monomeric or  
 CC dimeric IgG fusion protein for a dimeric fusion protein containing  
 CC engineered N-glycosylation sites, designated "mg").

XX SQ Sequence 437 AA;

Query Match 100.0%; Score 1263; DB 8; Length 437;

Best Local Similarity 100.0%; Pred. No. 3.2e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Db 206 EPKSCDKHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 265

QY 61 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDMLNGKEYKCKVSNKALPAPIEKT 120  
 |||||  
 Db 266 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDMLNGKEYKCKVSNKALPAPIEKT 325  
 |||||  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 |||||  
 Db 326 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 385  
 |||||  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSVCSVMHEALHNHYTOKSLSLSPGK 232  
 |||||  
 Db 386 PVLDSGSGFFLYSKLTVDKSRWQGNVFSVCSVMHEALHNHYTOKSLSLSPGK 437  
 |||||

## RESULT 82

ADQ47876  
 ID ADO47876 standard; protein; 439 AA.

XX AC ADO47876;

XX DT 15-JUL-2004 (first entry)

XX DE Alpha-Herpes virus resistance-related fusion protein SeqID1.

XX KW infection resistance; alpha-herpes virus; aHV; germinal transgenesis;  
 KW transgene; germ line cell; chimeric protein; extracellular domain; ED;  
 KW cellular receptor; crystallisable fragment; CF; immunoglobulin; Ig;  
 KW virucide; viral glycoprotein; virus elimination; pig; pseudorabies virus;  
 KW Aujeszky disease; human; mouse; murine.

XX OS Homo sapiens.

XX OS Mus sp.

XX OS Chimeric;.

XX PN FR2845692-A1.

XX PD 16-APR-2004.

XX PF 15-OCT-2002; 2002FR-00012775.

XX PR 15-OCT-2002; 2002FR-00012775.

XX PA (FRHY-) FRANCE HYBRIDES.

XX PI Ono E, Uede T;

XX DR WPI; 2004-319594/30.

XX XX Producing mammals resistant to infection by alpha-herpes virus,  
 PT particularly pigs resistant to pseudorabies, by expressing transgene  
 PT encoding fusion of receptor domain and immunoglobulin.

XX PS Disclosure; SEQ ID NO 1; 31pp; French.

XX CC This invention relates to a novel method of producing a non-human mammal  
 CC that has been made resistant to infection by an alpha-herpes virus (aHV)  
 CC by germinal transgenesis comprising introducing, by insertion or  
 CC homologous recombination, a transgene into the genome of germ line cells.  
 CC The transgene encodes, in a suitable expression system, a chimeric  
 CC protein comprising at least part of the extracellular domain (ED) of the  
 CC cellular receptor for aHV and a crystallisable fragment (CF) of an  
 CC immunoglobulin (Ig). The invention may be useful for the production of  
 CC compounds with a virucide activity through the binding of viral  
 CC glycoproteins, therefore inhibiting entry of virus into cells or  
 CC promoting elimination of virus. The method is especially used to produce  
 CC pigs that are resistant to infection by pseudorabies virus, the causative  
 CC agent of Aujeszky disease. The present sequence is that of a fusion  
 CC protein which may be used in the method of the invention.

XX SQ Sequence 439 AA;

Query Match 100.0%; Score 1263; DB 8; Length 439;

Best Local Similarity 100.0%; Pred. No. 3.2e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPELLGSPSVFLFPPKPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
|  
Db 208 EPKSCDKTHTCPPCPAPELLGSPSVFLFPPKPKDITLMISRTPEVTCVVDVSHEDPEVKF 267  
|  
QY 61 NWYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
|  
Db 268 NWYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 327  
|  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 180  
|  
Db 328 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 387  
|  
QY 181 PVLDSGGSFPLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPGK 232  
|  
Db 388 PVLDSGGSFPLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPGK 439  
|  
RESULT 83  
ADJ66000  
ID ADJ66000 standard; protein; 440 AA.  
XX  
AC ADJ66000;  
XX  
DT 06-MAY-2004 (first entry)  
XX  
DE Herpes virus entry mediator-related protein #6.  
XX  
KW therapeutic agent; endotoxin induced disease; fusion protein;  
KW Herpes virus entry mediator; HVEM; immunoglobulin Fc domain;  
KW endotoxin shock.  
XX  
OS Unidentified.  
XX  
PN JP2003128576-A.  
XX  
PD 08-MAY-2003.  
XX  
PF 25-OCT-2001; 2001JP-00328430.  
XX  
PR 25-OCT-2001; 2001JP-00328430.  
XX  
PA (TAIS ) TAISHO PHARM CO LTD.  
PA (GENE-) GENE TECHNO SCI KK.  
XX  
DR WPI; 2003-817833/77.  
XX  
PT New therapeutic agent, useful for treating endotoxin induced disease,  
PT comprises fusion protein of Herpes virus entry mediator protein and  
PT immunoglobulin.  
XX  
PS Disclosure; SEQ ID NO 11; 11pp; Japanese.  
XX  
CC The invention comprises a therapeutic agent for treating endotoxin  
CC induced disease, the therapeutic agent contains a fusion protein of the  
CC Herpes virus entry mediator (HVEM) protein and an immunoglobulin Fc  
CC domain. The therapeutic agent of the invention is useful for treating  
CC endotoxin induced disease, such as endotoxin shock. The present amino  
CC acid sequence represents protein which was used in the exemplification of  
CC the invention.  
XX  
SQ Sequence 440 AA;  
Query Match 100.0%; Score 1263; DB 7; Length 440;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPELLGSPSVFLFPPKPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
|  
Db 209 EPKSCDKTHTCPPCPAPELLGSPSVFLFPPKPKDITLMISRTPEVTCVVDVSHEDPEVKF 268  
|  
QY 61 NWYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
|

Db 269 NWYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 328  
|  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 180  
|  
Db 329 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 388  
|  
QY 181 PVLDSGGSFPLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPGK 232  
|  
Db 389 PVLDSGGSFPLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPGK 440  
|  
RESULT 84  
ADP03589  
ID ADP03589 standard; protein; 440 AA.  
XX  
AC ADP03589;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE Infection resistant mammal-related fusion protein SeqID1.  
XX  
KW infection resistant; alpha-herpes virus; aHV; HveC; nectin-1;  
KW functional receptor; germinal transgenesis; homologous recombination;  
KW germ line cell; virucide; viral glycoprotein; pig; pseudorabies virus;  
KW Aujeszky disease; bovine; bovine herpes virus-1;  
KW infectious rhinotracheitis; fusion; mouse; murine; human.  
XX  
OS Mus sp.  
OS Homo sapiens.  
XX  
PN FR2845693-A1.  
XX  
PD 16-APR-2004.  
XX  
PF 14-OCT-2003; 2003FR-00011983.  
XX  
PR 15-OCT-2002; 2002PR-00012775.  
XX  
PA (FRHY-) FRANCE HYBRIDES.  
XX  
PI Ono E, Uede T;  
XX  
WPI; 2004-332971/31.  
XX  
PT Producing mammals resistant to infection by alpha-herpes virus, e.g. pigs  
PT resistant to pseudorabies, by expressing transgene encoding fusion of  
PT receptor domain and immunoglobulin.  
XX  
PS Disclosure; SEQ ID NO 1; 43pp; French.  
XX  
CC This invention relates to a method of producing a non-human mammal that  
CC has been made resistant to infection by an alpha-herpes virus (aHV), for  
CC which the polypeptides HveC or nectin-1 represent functional receptors,  
CC by germinal transgenesis comprising introducing, by insertion or  
CC homologous recombination, a transgene into the genome of germ line cells.  
CC The invention may be useful for the production of compounds with a  
CC virucide activity. The invention promotes the binding of viral  
CC glycoproteins, thus inhibiting entry of a virus into cells or promoting  
CC elimination of virus. The method is especially used to produce pigs that  
CC are resistant to infection by pseudorabies virus, the causative agent of  
CC Aujeszky disease, or bovines that are resistant to bovine herpes virus-1,  
CC the causative agent of infectious rhinotracheitis. The present sequence  
CC is that of a fusion protein which was used in the method of the  
CC invention.  
XX  
SQ Sequence 440 AA;  
Query Match 100.0%; Score 1263; DB 8; Length 440;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPELLGSPSVFLFPPKPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
|

Db 209 EPKCDKTHTCPPCPAPPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 268  
 QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 269 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 328  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
 Db 329 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 388  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232  
 Db 389 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 440

RESULT 85  
 AAB28692  
 ID AAB28692 standard; protein; 441 AA.  
 XX AC AAB28692;  
 XX 14-FEB-2001 (first entry)  
 XX FC-huAGP-1 (95-281) fusion protein.  
 DE Human; AGP-1; type II transmembrane protein; cytostatic; antiviral;  
 XX antiinflammatory; hepatotropic; antiarteriosclerotic; anti-HIV; HIV;  
 KW human immunodeficiency virus; apoptosis; proliferative disorder; cancer;  
 KW hepatitis; acquired immunodeficiency syndrome; AIDS; autoimmune disorder;  
 KW transplant rejection; cardiovascular disease; arteriosclerosis;  
 KW FC-huAGP-1; fusion protein.  
 XX Homo sapiens.  
 XX OS  
 XX WO200063253-A1.  
 PN 26-OCT-2000.  
 XX 24-MAR-2000; 2000WO-US008004.  
 XX 16-APR-1999; 99US-00293245.  
 XX (AMGE-) AMGEN INC.  
 XX Hau H, Meng S;  
 XX WPI; 2000-665240/64.  
 DR N-PSDB; AAC67832.  
 XX Fusion protein of AGP-1 protein and an FC region, used to treat  
 PT proliferative disorders, immune disorders, and virally-induced disorders.  
 XX Disclosure; Fig 3; 93pp; English.

CC The present sequence is an AGP-1 fusion protein. AGP-1 is a type II  
 CC transmembrane protein. The fusion proteins comprise an FC immunoglobulin  
 CC region fused to the N-terminal portion of the AGP-1 protein. The fusion  
 CC proteins can be used to induce apoptosis in a tissue, and to treat  
 CC proliferative disorders, immune disorders, or virally-induced disorders.  
 CC The proliferative disorders include cancers, such as breast, prostate,  
 CC lung or colon cancer. The viral infections include hepatitis, and  
 CC acquired immunodeficiency syndrome (AIDS), and the immune disorders may  
 CC be autoimmune disorders or transplant rejection. Cardiovascular diseases  
 CC such as arteriosclerosis may also be treated. The AGP-1 containing fusion  
 CC proteins have increased biological activity compared to the soluble AGP-1  
 CC proteins used in prior art therapies  
 XX Sequence 441 AA;

Query Match 100.0%; Score 1263; DB 3; Length 441;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKCDKTHTCPPCPAPPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
 Db 24 EPKCDKTHTCPPCPAPPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 83  
 QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 84 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 143  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
 Db 144 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 203  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232  
 Db 204 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 255

RESULT 86  
 AAW10550  
 ID AAW10550 standard; protein; 442 AA.  
 XX AC AAW10550;  
 XX 22-APR-1997 (first entry)  
 XX IgG1 polypeptide.  
 DE IgG1; P-selectin ligand; PSGL-1; counter-receptor; E-selectin;  
 XX sialyl-Lewis X; antiinflammatory; inflammation;  
 KW extravasation-dependent adverse reaction; organ damage; clotting;  
 KW adult respiratory distress syndrome; glomerular nephritis;  
 KW ischaemic myocardial injury; immune reaction; septic shock; septicaemia;  
 KW therapy; diagnosis.  
 XX Homo sapiens.  
 XX OS  
 XX WO9700079-A1.  
 PN 03-JAN-1997.  
 XX 11-JUN-1996; 96WO-US010043.  
 XX 14-JUN-1995; 95US-0000213P.  
 XX (GEO ) GEN HOSPITAL CORP.  
 XX Seed B, Pouyani T;  
 XX WPI; 1997-077356/07.  
 DR N-PSDB; AAT60739.  
 XX P-selectin and opt. E-selectin binding organic mol. - having sialyl-Le(x)  
 PT and sulphated determinant, useful for protecting against inflammatory or  
 PT immune reactions.  
 XX Disclosure; Page 41-42; 81pp; English.

CC Examination of the IgG1 amino acid sequence (AAW10550) revealed a number  
 CC of sites at which N-linked glycan addition sites could be introduced in  
 CC order to impair complement fixing and Fc receptor binding ability. Site-  
 CC directed mutagenesis of the IgG1 gene (AAT60739) yielded a mutant gene  
 CC encoding an IgG1 polypeptide (AAW10551) contg. additional N-linked  
 CC glycosylation sites. The mutant IgG1 can be co-expressed in a host cell  
 CC together with an alpha-(1,3)fucosyltransferase capable of attaching  
 CC sialyl-Le(x) groups to the antibody glycosylation sites. The sialyl-Le(x)  
 CC - modified antibody has therapeutic applns., e.g. in minimizing  
 CC inflammation and decreasing extravasation-dependent organ damage and/or  
 CC clotting  
 XX Sequence 442 AA;

Query Match 100.0%; Score 1263; DB 2; Length 442;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 |||||  
 Db 211 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 270  
 |||||

QY 61 NWYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 |||||  
 Db 271 NWYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330  
 |||||

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTP 180  
 |||||  
 Db 331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTP 390  
 |||||

QY 181 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 232  
 |||||  
 Db 391 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 442  
 |||||

RESULT 87  
 ABR39465  
 ID ABR39465 standard; protein; 442 AA.  
 XX AC ABR39465;  
 XX DT 12-JUN-2003 (first entry)  
 XX DE Humanised anti-Abeta antibody 266 heavy chain.  
 XX KW Amyloid-beta; Abeta; antibody 266; neurotropic; neuroprotective; CDR;  
 XX KW immunostimulant.  
 XX OS Homo sapiens.  
 XX PN WO2003016467-A2.  
 XX PD 27-FEB-2003.  
 XX PF 14-AUG-2002; 2002WO-US021324.  
 XX PR 17-AUG-2001; 2001US-0313576P.  
 XX PR 28-MAY-2002; 2002US-0383851P.  
 XX PA (ELIL ) LILLY & CO ELI.  
 XX PI Bales KR, Paul SM;  
 XX WPI; 2003-289975/28.  
 XX PT Treating or reducing the progression of diseases associated with amyloid-  
 PT beta peptide, e.g. Alzheimer's disease, vascular dementia or mild  
 PT cognitive impairment, comprises administering an anti-amyloid-beta  
 PT peptide antibody.  
 XX PS Disclosure; Page 20-22; 84pp; English.  
 XX CC The invention relates to treating cognitive symptoms or reducing disease  
 CC progression in a subject having a condition or disease associated with  
 CC an amyloid-beta peptide (Abeta). The method involves administering an amount  
 CC of an anti-Abeta antibody that has greater affinity for soluble Abeta  
 CC than 10<sup>-9</sup> M, that has affinity (KD) for soluble Abeta1-40 or Abeta1-42  
 CC higher than 10<sup>-9</sup> M, or that has greater affinity for soluble Abeta than  
 CC antibody 266 has. The method or the anti-Abeta antibody is useful in  
 CC preparing a medicament for treating cognitive symptoms or reducing  
 CC disease progression in a subject having a condition or disease associated  
 CC with Abeta. The condition or disease is Alzheimer's disease, Down's  
 CC syndrome, cerebral amyloid angiopathy, vascular dementia, or mild  
 CC cognitive impairment. The present sequence represents a humanised anti-  
 CC Abeta antibody 266 heavy chain  
 XX SQ Sequence 442 AA;

Query Match 100.0%; Score 1263; DB 6; Length 442;

Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 |||||  
 Db 211 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 270  
 |||||

QY 61 NWYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 |||||  
 Db 271 NWYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330  
 |||||

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTP 180  
 |||||  
 Db 331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTP 390  
 |||||

QY 181 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 232  
 |||||  
 Db 391 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 442  
 |||||

RESULT 88  
 ABR39474  
 ID ABR39474 standard; protein; 442 AA.  
 XX AC ABR39474;  
 XX DT 12-JUN-2003 (first entry)  
 XX DE Humanised anti-Abeta antibody 266 analogue heavy chain.  
 XX KW Amyloid-beta; Abeta; antibody 266; neurotropic; neuroprotective; CDR;  
 XX KW immunostimulant.  
 XX OS Synthetic.  
 XX PN WO2003016467-A2.  
 XX PD 27-FEB-2003.  
 XX PF 14-AUG-2002; 2002WO-US021324.  
 XX PR 17-AUG-2001; 2001US-0313576P.  
 XX PR 28-MAY-2002; 2002US-0383851P.  
 XX PA (ELIL ) LILLY & CO ELI.  
 XX PI Bales KR, Paul SM;  
 XX WPI; 2003-289975/28.  
 XX PT Treating or reducing the progression of diseases associated with amyloid-  
 PT beta peptide, e.g. Alzheimer's disease, vascular dementia or mild  
 PT cognitive impairment, comprises administering an anti-amyloid-beta  
 PT peptide antibody.  
 XX PS Disclosure; Page 29-31; 84pp; English.  
 XX CC The invention relates to treating cognitive symptoms or reducing disease  
 CC progression in a subject having a condition or disease associated with

CC amyloid-beta peptide (Abeta). The method involves administering an amount  
CC of an anti-Abeta antibody that has greater affinity for soluble Abeta  
CC than 10<sup>-9</sup> M, that has affinity (KD) for soluble Abeta1-40 or Abeta1-42  
CC higher than 10<sup>-9</sup> M, or that has greater affinity for soluble Abeta than  
CC antibody 266 has. The method or the anti-Abeta antibody is useful in  
CC preparing a medicament for treating cognitive symptoms or reducing  
CC disease progression in a subject having a condition or disease associated  
CC with Abeta. The condition or disease is Alzheimer's disease, Down's  
CC syndrome, cerebral amyloid angiopathy, vascular dementia, or mild  
CC cognitive impairment. The present sequence represents a preferred heavy  
CC chain of a humanised anti-Abeta antibody 266 analogue that has a high  
CC affinity for Abeta  
XX  
SQ Sequence 442 AA;

Query Match 100.0%; Score 1263; DB 6; Length 442;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLPFPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 211 EPKSCDKTHTCPPCPAPPELLGGPSVFLPFPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 271 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 331 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 390  
QY 181 PVLDSGSGFFLYSKLTVDSKRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
Db 391 PVLDSGSGFFLYSKLTVDSKRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 442

RESULT 89

ABU08311  
ID ABU08311 standard; protein; 442 AA.  
AC ABU08311;  
XX  
XX  
DT 22-MAY-2003 (first entry)  
XX  
XX Humanised 266 antibody heavy chain.  
XX  
XX Mouse; cognition; Abeta peptide associated disorder; anti-Abeta antibody;  
KW cognitive impairment; Alzheimer's disease; Down's syndrome;  
KW cerebral amyloid angiopathy; vascular dementia; neurotropic;  
KW mild cognitive impairment; antibody 266; heavy chain; humanised; mutant;  
KW mutein.  
XX  
XX Mus sp.  
OS Synthetic.  
XX  
XX WO2003015691-A2.  
PN  
PD 27-FEB-2003.  
XX  
XX 14-AUG-2002; 2002WO-US021323.  
XX  
XX 17-AUG-2001; 2001US-0313222P.  
PR  
PR 28-MAY-2002; 2002US-0383846P.  
XX  
XX (ELIL ) LILLY & CO ELI.  
XX  
XX Bales KR, Dodart JF, Paul SM;  
PI  
XX WPI; 2003-268234/26.  
XX  
XX Effecting rapid improvement of cognition in a subject having Alzheimer's  
PT disease, Down's syndrome, cerebral amyloid angiopathy, or mild cognitive  
PT impairment, comprises administering anti-A beta antibody.

XX Disclosure; Page 21-23; 85pp; English.  
XX  
XX The present invention relates to a method for effecting rapid improvement  
CC of cognition in a subject having a condition or disease related to the  
CC Abeta peptide. The method comprises administering an anti-Abeta antibody.  
CC The method is useful for treating cognitive impairments associated with  
CC Abeta peptide including those involved in Alzheimer's disease, Down's  
CC syndrome, cerebral amyloid angiopathy, certain vascular dementia, and  
CC certain forms of mild cognitive impairment. The anti-Abeta antibody is  
CC useful for preparing a medicament for effecting rapid improvement in  
CC cognition in a subject having Alzheimer's disease, Down's syndrome,  
CC cerebral amyloid angiopathy, or mild cognitive impairment. The present  
CC sequence represents a preferred heavy chain for a humanised 266 antibody  
XX  
SQ Sequence 442 AA;

Query Match 100.0%; Score 1263; DB 6; Length 442;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLPFPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 211 EPKSCDKTHTCPPCPAPPELLGGPSVFLPFPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 271 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 331 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 390  
QY 181 PVLDSGSGFFLYSKLTVDSKRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
Db 391 PVLDSGSGFFLYSKLTVDSKRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 442

RESULT 90

ABU08320  
ID ABU08320 standard; protein; 442 AA.  
XX  
XX AC ABU08320;  
XX  
XX DT 22-MAY-2003 (first entry)  
XX  
XX Humanised antibody 266 heavy chain.  
XX  
XX Mouse; cognition; Abeta peptide associated disorder; anti-Abeta antibody;  
KW cognitive impairment; Alzheimer's disease; Down's syndrome;  
KW cerebral amyloid angiopathy; vascular dementia; neurotropic;  
KW mild cognitive impairment; heavy chain; antibody 266; mutant; mutein.  
XX  
XX Mus sp.  
OS Synthetic.  
XX  
XX Key Location/Qualifiers  
FH Misc-difference 56  
FT /note= "Any amino acid, provided that if Xaa at position  
FT 57 is neither Asp nor Pro and Xaa at position 58 is Ser  
FT or Thr, then Xaa at position 56 is not Asn"  
FT  
FT Misc-difference 57  
FT /note= "Any amino acid, provided that if Xaa at position  
FT 56 is Asn and Xaa at position 58 is Ser or Thr, then Xaa  
FT at position 57 is Asp or Pro"  
FT  
FT Misc-difference 58  
FT /note= "Any amino acid, provided that if Xaa at position  
FT 56 is Asn and Xaa at position 57 is neither Asp nor Pro,  
FT then Xaa at position 58 is neither Ser nor Thr"  
XX  
XX WO2003015691-A2.  
PN  
XX 27-FEB-2003.



XX DT 13-JUN-2003 (first entry)  
 XX DE Deglycosylated heavy chain.  
 XX KW Complementarity determining region; CDR; humanised; mouse; 266; light;  
 KW heavy; variable; domain; antibody; preclinical; clinical;  
 KW Alzheimer's disease; epitope; amyloid beta peptide; Abeta;  
 KW central nervous system; plasma.  
 XX OS Homo sapiens.  
 OS Mus musculus.  
 XX FH Key Location/Qualifiers  
 FT Misc-difference 56 /label= Any amino acid  
 FT /note= "Provided that if Xaa57 is neither Asp nor Pro and  
 FT Xaa58 is Ser or Thr, then Xaa56 is not Asn"  
 FT Misc-difference 57 /label= Any amino acid  
 FT /note= "Provided that if Xaa56 is Asn and Xaa58 is Ser or  
 FT Thr, then Xaa57 is Asp or Pro"  
 FT Misc-difference 58 /label= Any amino acid  
 FT /note= "Provided that if Xaa56 is Asn and Xaa57 is  
 FT neither Asp nor Pro, then Xaa58 is neither Ser nor Thr"  
 XX PN WO2003015617-A2.  
 XX XX  
 XX PD 27-FEB-2003.  
 XX PF 16-AUG-2002; 2002WO-US026321.  
 XX PR 17-AUG-2001; 2001US-0313221P.  
 PR 17-AUG-2001; 2001US-0313224P.  
 PR 23-OCT-2001; 2001US-0334987P.  
 XX (UNIW ) UNIV WASHINGTON.  
 PA (ELIL ) LILLY & CO ELI.  
 XX Holtzman DM, Demattos R, Bales KR, Cummins DJ, Paul SM;  
 PI WPI; 2003-278505/27.  
 XX DR  
 XX PT Diagnosing preclinical or clinical Alzheimer's disease in a subject by  
 PT administering an antibody which specifically binds an epitope.  
 XX PS Claim 8; Page 20-22; 64pp; English.  
 XX CC This sequence represents the preferred heavy chain from a deglycosylated  
 CC version of the humanised mouse antibody 266 heavy chain of the invention.  
 CC The antibody of the invention specifically binds an epitope, preferably  
 CC the amyloid beta peptide (Abeta). The antibodies sequester Abeta from its  
 CC bound, circulating form in blood and alter clearance of soluble and bound  
 CC forms of Abeta in central nervous system and plasma. The antibodies  
 CC specifically bind an epitope representing amino acids 13-28 of the Abeta  
 CC molecule. Deglycosylation of the heavy chain CDR2, as in this sequence,  
 CC causes higher affinity for Abeta. The antibody of the invention may be  
 CC used for diagnosing preclinical or clinical Alzheimer's disease  
 XX SQ Sequence 442 AA;  
 Query Match 100.0%; Score 1263; DB 6; Length 442;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 211 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 270  
 QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 120  
 DB 271 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 330

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 331 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 390  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
 DB 391 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 442  
 RESULT 93  
 ABB80109  
 ID ABB80109 standard; protein; 442 AA.  
 XX AC ABB80109;  
 XX DT 13-JUN-2003 (first entry)  
 XX DE Heavy chain.  
 XX KW Complementarity determining region; CDR; humanised; mouse; 266; light;  
 KW heavy; variable; domain; antibody; preclinical; clinical;  
 KW Alzheimer's disease; epitope; amyloid beta peptide; Abeta;  
 KW central nervous system; plasma.  
 XX OS Homo sapiens.  
 OS Mus musculus.  
 XX PN WO2003015617-A2.  
 XX PD 27-FEB-2003.  
 XX PF 16-AUG-2002; 2002WO-US026321.  
 XX PR 17-AUG-2001; 2001US-0313221P.  
 PR 17-AUG-2001; 2001US-0313224P.  
 PR 23-OCT-2001; 2001US-0334987P.  
 XX (UNIW ) UNIV WASHINGTON.  
 PA (ELIL ) LILLY & CO ELI.  
 XX Holtzman DM, Demattos R, Bales KR, Cummins DJ, Paul SM;  
 PI WPI; 2003-278505/27.  
 XX DR  
 XX PT Diagnosing preclinical or clinical Alzheimer's disease in a subject by  
 PT administering an antibody which specifically binds an epitope.  
 XX PS Disclosure; Page 15-16; 64pp; English.  
 XX CC The sequences given in AAG80104-09 represent preferred antibodies of the  
 CC invention. This sequence represents the preferred heavy chain. The  
 CC humanised antibody of the invention may be used for diagnosing  
 CC preclinical or clinical Alzheimer's disease. The antibody specifically  
 CC binds an epitope, preferably the amyloid beta peptide (Abeta). The  
 CC antibodies sequester Abeta from its bound, circulating form in blood and  
 CC alter clearance of soluble and bound forms of Abeta in central nervous  
 CC system and plasma. The antibodies specifically bind an epitope  
 XX representing amino acids 13-28 of the Abeta molecule  
 XX SQ Sequence 442 AA;  
 Query Match 100.0%; Score 1263; DB 6; Length 442;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 211 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 270  
 QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 120  
 DB 271 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 330

QY 121 ISKAGQPREPOVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPENNYKTP 180  
 DB 331 ISKAGQPREPOVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPENNYKTP 390  
 QY 181 PVLSDSGSFLLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKQSLSPGK 232  
 DB 391 PVLSDSGSFLLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKQSLSPGK 442

RESULT 94  
 ADE94066  
 ID ADE94066 standard; protein; 442 AA.  
 AC ADE94066;  
 XX  
 XX  
 DT 12-FEB-2004 (first entry)  
 XX  
 DE Humanised anti-Abeta antibody 266 heavy chain SEQ ID NO:12.  
 XX  
 KW anxiety disorder; mood disorder; anti-Abeta antibody; Abeta; nootropic;  
 KW neuroprotective; antidepressant; neuroleptic; tranquilizer;  
 KW gene therapy; Alzheimer's disease; chronic amyloid angiopathy;  
 KW depression; major depressive episode; unipolar major depression;  
 KW schizophrenia; simple phobia; social phobia; agoraphobia; panic disorder;  
 KW obsessive-compulsive disorder; post-traumatic stress disorder.  
 XX  
 OS Synthetic.  
 OS Mus sp.  
 OS Homo sapiens.  
 XX  
 XX WO2003090772-A1.  
 XX  
 XX 06-NOV-2003.  
 XX  
 XX 17-APR-2003; 2003WO-US010473.  
 XX  
 XX 25-APR-2002; 2002US-0375462P.  
 XX  
 XX (ELIL ) LILLY & CO ELI.  
 XX Gerlai RT;  
 XX  
 XX WPI; 2003-865528/80.  
 XX  
 XX Treating, preventing and/or diagnosing a condition related to Abeta  
 XX expression, such as anxiety or mood disorders, including Alzheimer's  
 XX disease, depression, and schizophrenia, by administering an anti-Abeta  
 XX antibody to the subject.  
 XX  
 XX Claim 24; SEQ ID NO 12; 64pp; English.  
 XX  
 XX The present invention describes a method for treating an anxiety disorder  
 XX or a mood disorder in an elderly subject. The method comprises  
 XX administering an anti-Abeta antibody to the subject. Also described are  
 XX Abeta nucleic acids, polypeptides, antibodies and pharmaceutical  
 XX compositions used in the methods of the invention. Abeta has nootropic,  
 XX neuroprotective, antidepressant, neuroleptic and tranquilizer  
 XX activities, and can be used in gene therapy. The methods and compositions  
 XX of the present invention are useful for treating, preventing and/or  
 XX diagnosing a condition related to Abeta expression, such as anxiety or  
 XX mood disorders, including Alzheimer's disease, chronic amyloid  
 XX angiopathy, depression, major or minor depression, a major depressive  
 XX episode, a unipolar major depression, schizophrenia, simple phobia,  
 XX social phobia, agoraphobia, panic disorder, obsessive-compulsive disorder  
 XX or post-traumatic stress disorder. The present sequence is used in the  
 XX exemplification of the present invention.

SQ Sequence 442 AA;

Query Match 100.0%; Score 1263; DB 7; Length 442;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 211 EPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 270  
 QY 61 NMYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 271 NMYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330  
 QY 121 ISKAGQPREPOVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPENNYKTP 180  
 DB 331 ISKAGQPREPOVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPENNYKTP 390  
 QY 181 PVLSDSGSFLLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKQSLSPGK 232  
 DB 391 PVLSDSGSFLLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKQSLSPGK 442

RESULT 95  
 ADE94075  
 ID ADE94075 standard; protein; 442 AA.  
 AC ADE94075;  
 XX  
 DT 12-FEB-2004 (first entry)  
 XX  
 DE Humanised anti-Abeta antibody heavy chain SEQ ID NO:21.  
 XX  
 KW anxiety disorder; mood disorder; anti-Abeta antibody; Abeta; nootropic;  
 KW neuroprotective; antidepressant; neuroleptic; tranquilizer;  
 KW gene therapy; Alzheimer's disease; chronic amyloid angiopathy;  
 KW depression; major depressive episode; unipolar major depression;  
 KW schizophrenia; simple phobia; social phobia; agoraphobia; panic disorder;  
 KW obsessive-compulsive disorder; post-traumatic stress disorder.  
 XX  
 OS Synthetic.  
 OS Mus sp.  
 OS Homo sapiens.  
 XX  
 XX  
 XX Key Location/Qualifiers  
 XX Misc-difference 56  
 XX /note= "X at position 56 is any amino acid, provided that  
 XX if X at position 57 is neither Asp nor Pro and X at  
 XX position 59 is Ser or Thr, then X at position 56 is not  
 XX Asn"  
 XX  
 XX Misc-difference 57  
 XX /note= "X at position 57 is any amino acid, provided that  
 XX if X at position 56 is Asn and X at position 58 is Ser or  
 XX Thr, then X at position 57 is Asp or Pro"  
 XX  
 XX Misc-difference 58  
 XX /note= "X at position 58 is any amino acid, provided that  
 XX if X at position 56 is Asn and X at position 57 is  
 XX neither Asp nor Pro, then X at position 58 is neither Ser  
 XX nor Thr"  
 XX  
 XX WO2003090772-A1.  
 XX  
 XX 06-NOV-2003.  
 XX  
 XX 17-APR-2003; 2003WO-US010473.  
 XX  
 XX 25-APR-2002; 2002US-0375462P.  
 XX  
 XX (ELIL ) LILLY & CO ELI.  
 XX Gerlai RT;  
 XX  
 XX WPI; 2003-865528/80.  
 XX  
 XX Treating, preventing and/or diagnosing a condition related to Abeta  
 XX expression, such as anxiety or mood disorders, including Alzheimer's  
 XX disease, depression, and schizophrenia, by administering an anti-Abeta  
 XX antibody to the subject.

XX Claim 24; SEQ ID NO 21; 64pp; English.

XX The present invention describes a method for treating an anxiety disorder

XX or a mood disorder in an elderly subject. The method comprises

CC administering an anti-Abeta antibody to the subject. Also described are

CC Abeta nucleic acids, polypeptides, antibodies and pharmaceutical

CC compositions used in the methods of the invention. Abeta has nootropic,

CC neuroprotective, antidepressant, neuroleptic and tranquilizer

CC activities, and can be used in gene therapy. The methods and compositions

CC of the present invention are useful for treating, preventing and/or

CC diagnosing a condition related to Abeta expression, such as anxiety or

CC mood disorders, including Alzheimer's disease, chronic amyloid

CC angiopathy, depression, major or minor depression, a major depressive

CC episode, a unipolar major depression, schizophrenia, simple phobia,

CC social phobia, agoraphobia, panic disorder, obsessive-compulsive disorder

CC or post-traumatic stress disorder. The present sequence is used in the

CC exemplification of the present invention.

XX SQ Sequence 442 AA;

Query Match 100.0%; Score 1263; DB 7; Length 442;

Best Local Similarity 100.0%; Pred. No. 3.3e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

DB 211 EPKSCDKHTCPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

QY 61 NMYVDGVEVHNATKPREQYNSTYRVSVLTIVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

DB 271 NMYVDGVEVHNATKPREQYNSTYRVSVLTIVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

QY 121 ISKAKGQPEPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 180

DB 331 ISKAKGQPEPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 390

QY 181 PVLDSGSEFLYSKLTVDKSRWQQGNVFCVSVHNEALHNHYTQKSLSLSPGK 232

DB 391 PVLDSGSEFLYSKLTVDKSRWQQGNVFCVSVHNEALHNHYTQKSLSLSPGK 442

RESULT 96

ADH54473

ID ADH54473 standard; protein; 442 AA.

AC ADH54473;

XX 25-MAR-2004 (first entry)

XX Human immunoglobulin IgG1protein.

XX Human; ELAM-1 protein; sialyl-Lex determinant; immune reaction;

KW inflammation; sepsis; organ damage; leukocyte extravasation;

KW adult respiratory distress syndrome; glomerular nephritis;

KW rheumatoid arthritis; gene therapy; antibody-based therapy; heart attack;

KW septic shock; septicemia; rheumatoid arthritis; psoriasis;

XX immunoglobulin, IgG1.

OS Homo sapiens.

XX Key Location/Qualifiers

FT Misc-difference 211 /note= "Encoded by AGA"

FT Misc-difference 212 /note= "Encoded by GCC "

FT Misc-difference 213 /note= "Encoded by CAA"

FT Misc-difference 214 /note= "Encoded by ATC"

FT Misc-difference 215 /note= "Encoded by TTG"

FT Misc-difference 216

FT Misc-difference 217 /note= "Encoded by TGA "

FT Misc-difference 218 /note= "Encoded by CAA"

FT Misc-difference 219 /note= "Encoded by AAC "

FT Misc-difference 220 /note= "Encoded by TCA "

FT Misc-difference 221 /note= "Encoded by CAC"

FT Misc-difference 222 /note= "Encoded by ATG "

FT Misc-difference 223 /note= "Encoded by ACC"

FT Misc-difference 224 /note= "Encoded by GTG"

FT Misc-difference 238 /note= "Encoded by TAG"

FT Misc-difference 239 /note= "Encoded by GGG"

FT Misc-difference 240 /note= "Encoded by GGT"

FT Misc-difference 241 /note= "Encoded by TTT "

FT Misc-difference 242 /note= "Encoded by GGG"

FT Misc-difference 243 /note= "Encoded by TTC"

FT Misc-difference 244 /note= "Encoded by CTG"

FT Misc-difference 245 /note= "Encoded by TGG"

FT Misc-difference 246 /note= "Encoded by GAG"

FT Misc-difference 247 /note= "Encoded by TAC"

FT Misc-difference 248 /note= "Encoded by TAG"

FT Misc-difference 249 /note= "Encoded by AGG"

FT Misc-difference 250 /note= "Encoded by GCC"

FT Misc-difference 251 /note= "Encoded by TGG "

FT Misc-difference 252 /note= "Encoded by GGA"

FT Misc-difference 253 /note= "Encoded by CTC"

FT Misc-difference 254 /note= "Encoded by CAG"

FT Misc-difference 255 /note= "Encoded by TGT"

FT Misc-difference 256 /note= "Encoded by ACG"

FT Misc-difference 257 /note= "Encoded by CAC"

FT Misc-difference 258 /note= "Encoded by CTG "

XX US6613746-B1.

XX 02-SEP-2003.

XX 07-JUN-1995; 95US-00472888.

XX 23-NOV-1990; 90US-00618314.

XX (GEO ) GEN HOSPITAL CORP.

XX Seed B, Walz G;

XX WPI; 2003-895370/82.

XX N-PSDB; ADH54467.

PT Inhibiting the binding of a cell bearing ELAM-1 protein to a cell bearing  
PT sialyl-Lex determinant, useful in treating inflammation, comprises  
PT contacting the ELAM-1 bearing cell with alpha 1-acid glycoprotein-  
XX antibody fusion protein.

PS Disclosure; SEQ ID NO 7; 40pp; English.

XX  
CC The invention relates to a method for inhibiting the binding of a cell  
CC bearing an ELAM-1 protein to a molecule or cell bearing a sialyl-Lex  
CC determinant. The method comprising contacting the ELAM-1 bearing cell  
CC with an alpha 1-acid glycoprotein (AGP)-antibody fusion protein bearing  
CC the sialyl-Lex determinant, where the inhibition of an ELAM-1-sialyl-Lex-  
CC based interaction treats an adverse immune reaction. The invention is  
CC useful in reducing inflammation in a human patient and protecting a  
CC mammal against any adverse immune reaction (including sepsis, organ  
CC damage attributable to inappropriate leukocyte extravasation, adult  
CC respiratory distress syndrome, glomerular nephritis or rheumatoid  
CC arthritis). The invention is useful in gene therapy. The method, as well  
CC as the AGP-antibody fusion protein, are useful in any antibody-based  
CC therapy, for e.g. to reduce inflammation or to treat heart attack, septic  
CC shock, septicemia, rheumatoid arthritis or psoriasis. The present  
CC sequence is human immunoglobulin IgG1 protein.

XX SQ Sequence 442 AA;

Query Match 100.0%; Score 1263; DB 7; Length 442;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 211 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 270  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVKSNKALPAPIEKT 120  
DB 271 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVKSNKALPAPIEKT 330  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 180  
DB 331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 390  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSPGK 232  
DB 391 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSPGK 442

RESULT 97  
ADN61714  
ID ADN61714 standard; protein; 442 AA.

XX AC ADN61714;  
XX DT 01-JUL-2004 (first entry)  
XX DE Humanised antibody heavy chain variable region #3.  
XX KW antibody: humanised antibody;  
XX KW light chain complementarity determining region; CDR; amyloid plaque;  
XX KW amyloid beta; Abeta; cognitive decline; Alzheimer's disease;  
XX KW Down's syndrome; cerebral amyloid angiopathy; cognition;  
XX KW heavy chain variable region.

OS Homo sapiens.  
OS Mus sp.

XX XX US2004043418-A1.  
XX XX 04-MAR-2004.  
XX XX 21-AUG-2002; 2002US-00226435.  
XX XX 21-AUG-2002; 2002US-00226435.

PA (HOLT/) HOLTZMAN D M.  
PA (DEMA/) DEMATTOS R.  
PA (BALE/) BALE K R.  
PA (PAUL/) PAUL S M.  
PA (TSUR/) TSURUSHITA N.  
PA (VASQ/) VASQUEZ M.

XX Holtzman DM, Demattos R, Bales KR, Paul SM, Tsurushita N;  
PI Vasquez M;

XX WPI: 2004-238334/22.  
DR N-PSDB; ADN61720.

XX New humanized antibody or its fragment that sequesters amyloid beta  
PT peptide, useful for treating, preventing or reversing cognitive decline  
PT in Alzheimer's disease and Down's syndrome.

XX Claim 5; SEQ ID NO 12; 35pp; English.

XX The invention relates to a humanised antibody or its fragment comprising  
CC a light chain comprising three light chain complementarity determining  
CC regions (CDRs) and a light chain framework sequence from a humanised  
CC immunoglobulin light chain, a heavy chain comprising three heavy chain  
CC CDRs and a heavy chain framework sequence from a humanised immunoglobulin  
CC heavy chain. Also described are the following: (i) a polynucleic acid  
CC comprising a sequence coding for the light chain or the heavy chain of  
CC the humanised antibody; (ii) an expression vector for expressing the  
CC antibody or its fragment comprising nucleotide sequences encoding the  
CC antibody or fragment; and (iii) a cell transfected with the expression  
CC vector or two expression vectors, where a first vector comprises the  
CC polynucleotide sequence coding for the light chain and a second vector  
CC comprises the sequence coding for the heavy chain, and capable of  
CC expressing the humanised antibody or its fragment. The humanised antibody  
CC or its fragment is useful in inhibiting or reducing the formation of  
CC amyloid plaques or the effects of toxic soluble amyloid beta (Abeta)  
CC species in humans, for treating, preventing, or reversing cognitive  
CC decline in clinical or pre-clinical Alzheimer's disease, Down's syndrome,  
CC or clinical or pre-clinical cerebral amyloid angiopathy, and for  
CC improving cognition in a subject. The present sequence represents  
CC humanised antibody heavy chain variable region #3.

XX SQ Sequence 442 AA;

Query Match 100.0%; Score 1263; DB 8; Length 442;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 BPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 211 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 270  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVKSNKALPAPIEKT 120  
DB 271 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVKSNKALPAPIEKT 330  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 180  
DB 331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 390  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSPGK 232  
DB 391 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSPGK 442

RESULT 98  
AAE35327  
ID AAE35327 standard; protein; 444 AA.

XX AC AAE35327;  
XX DT 17-JUN-2003 (first entry)  
XX DE Humanised murine antibody BIWA4 heavy chain protein.

XX CD44; cytotoxic drug; therapy; cancer; tumour; minimal residual disease;  
 KW antigen; cytostatic; BIWA4 antibody; murine.  
 XX  
 OS Homo sapiens.  
 XX  
 XX EPI258255-A1.  
 XX  
 XX 20-NOV-2002.  
 XX  
 XX 18-MAY-2001; 2001EP-00112227.  
 XX  
 XX 18-MAY-2001; 2001EP-00112227.  
 XX  
 XX (BOEH ) BOEHRINGER INGELHEIM INT GMBH.  
 XX  
 XX Adolf G, Heider K, Patzelt E, Sproll M;  
 XX  
 XX WPI; 2003-177273/18.  
 XX  
 XX N-PSDB; AAD53977.  
 XX  
 XX New compound useful for treatment of cancer comprises CD44 specific  
 PT antibody molecule conjugated to a highly cytotoxic drug, which cleaves  
 PT under intracellular conditions.  
 XX  
 XX Claim 7; Page 15-16; 31pp; English.  
 XX  
 XX The invention relates to a compound comprising CD44 specific antibody  
 CC molecule conjugated to a highly cytotoxic drug, which cleaves under  
 CC intracellular conditions. The compound is used in pharmaceutical  
 CC composition for the treatment of cancer, solid tumours, and as an  
 CC adjuvant to surgical intervention to treat minimal residual disease. The  
 CC present sequence is humanised murine antibody BIWA4 heavy chain protein  
 CC used in the invention  
 XX  
 XX SQ Sequence 444 AA;  
 Query Match 100.0%; Score 1263; DB 6; Length 444;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 213 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 272  
 QY 61 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVTLHODWLNKGEYKCKVSNKALPAPIEKT 120  
 Db 273 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVTLHODWLNKGEYKCKVSNKALPAPIEKT 332  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 Db 333 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 392  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 Db 393 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 444  
 RESULT 99  
 AAE34876  
 ID AAE34876 standard; protein; 444 AA.  
 XX  
 XX AAE34876;  
 XX  
 XX 28-MAY-2003 (first entry)  
 XX  
 XX BIWA4/8 antibody heavy chain mature protein.  
 DE  
 XX BIWA8 antibody; heavy chain variable region; light chain variable region;  
 KW VH; VL; CD44v6; medicament; cancer; antibody therapy.  
 XX  
 XX Unidentified.  
 XX

PN WO200294879-A1.  
 XX  
 XX 28-NOV-2002.  
 XX  
 XX 17-MAY-2002; 2002WO-EP005467.  
 XX  
 XX 18-MAY-2001; 2001EP-00112237.  
 XX  
 XX 26-SEP-2001; 2001US-0325147P.  
 XX  
 XX (BOEH ) BOEHRINGER INGELHEIM INT GMBH.  
 XX  
 XX (BOEH ) BOEHRINGER INGELHEIM PHARM INC.  
 XX  
 XX Adolf G, Ostermann E, Patzelt E, Sproll M, Heider K;  
 XX  
 XX Miglietta JJ, Van Dongen AAMS;  
 XX  
 XX WPI; 2003-129413/12.  
 XX  
 XX N-PSDB; AAD53212, AAD53215.  
 XX  
 XX New antibodies specific for an epitope coded by the variant exon of the  
 PT CD44 gene, useful for treating cancer, including non-small cell lung,  
 PT breast, head and neck, ovarian and lung cancer.  
 XX  
 XX Claim 24; Col 44; 78pp; English.  
 XX  
 XX The present invention relates to novel antibody molecules comprising a  
 CC variable region of the heavy (VH) and/or light chain (VL) of CD44v6  
 CC specific humanised antibody called BIWA8 and BIWA4. Sequences of the  
 CC invention are useful for manufacturing a medicament and for treating  
 CC cancer including colorectum, non-small cell lung, breast, head and neck,  
 CC ovarian, lung, bladder, pancreatic cancer or metastatic cancers of the  
 CC brain. They are also useful in antibody therapy. The present sequence is  
 CC BIWA4/8 antibody heavy chain mature protein. This sequence is used in the  
 CC exemplification of the invention  
 XX  
 XX SQ Sequence 444 AA;  
 Query Match 100.0%; Score 1263; DB 6; Length 444;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 213 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 272  
 QY 61 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVTLHODWLNKGEYKCKVSNKALPAPIEKT 120  
 Db 273 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVTLHODWLNKGEYKCKVSNKALPAPIEKT 332  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 Db 333 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 392  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 Db 393 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 444  
 RESULT 100  
 ADL15443  
 ID ADL15443 standard; protein; 444 AA.  
 XX  
 XX ADL15443;  
 XX  
 XX 06-MAY-2004 (first entry)  
 XX  
 XX Humanised murine antibody BIWA4/BIWA8 heavy chain protein.  
 DE  
 XX cancer; cell differentiation antigen-44; CD44; cytotoxic;  
 KW chemotherapeutic agent; cytostatic; head; neck squamous cell carcinoma;  
 KW oesophagus; lung; skin; cervix; breast adenocarcinoma; pancreas; colon;  
 KW stomach; human; murine; mouse; antibody; BIWA8; BIWA4; heavy chain.  
 XX  
 XX Homo sapiens.

OS Mus sp.  
 XX EP1391213-A1.  
 XX 25-FEB-2004.  
 XX 21-AUG-2002; 2002EP-00018686.  
 XX 21-AUG-2002; 2002EP-00018686.  
 XX (BOEH ) BOEHRINGER INGELHEIM INT GMBH.  
 XX Adolf G, Baum A, Heider K;  
 XX WPI; 2004-249201/24.  
 XX N-PSDB; ADL15444.  
 XX Use of a conjugate of antibody to specified cell differentiation antigen  
 PT with cytotoxic compound in the preparation of pharmaceutical composition  
 PT for the treatment of cancer.  
 XX Claim 7; SEQ ID NO 6; 52pp; English.  
 XX The invention relates to a novel method for the preparation of a  
 CC pharmaceutical composition for the treatment of cancer whereby a  
 CC conjugate of a specific antibody to cell differentiation antigen-44  
 CC (CD44) with a cytotoxic compound is used optionally in combination with a  
 CC chemotherapeutic agent. The method of the invention has cytostatic  
 CC applications and may be useful in the preparation of a pharmaceutical  
 CC composition for the treatment of cancer, particularly head and neck  
 CC squamous cell carcinoma, oesophagus squamous cell carcinoma, lung  
 CC squamous cell carcinoma, skin squamous cell carcinoma, cervix squamous  
 CC cell carcinoma, breast adenocarcinoma, lung adenocarcinoma, pancreas  
 CC adenocarcinoma, colon adenocarcinoma and stomach adenocarcinoma. The  
 CC current sequence is that of the humanised murine antibody BIWA4/BIWA8  
 CC heavy chain protein of the invention.  
 XX Sequence 444 AA;  
 SQ Query Match 100.0%; Score 1263; DB 8; Length 444;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKHTCCPPAPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 213 EPKSCDKHTCCPPAPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 272  
 QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 273 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 332  
 QY 121 ISKAGQPREPQVYTLPPSDELTKNQVSLTCLVKGFYPSDIAVEGSGQPENNYKTTTP 180  
 DB 333 ISKAGQPREPQVYTLPPSDELTKNQVSLTCLVKGFYPSDIAVEGSGQPENNYKTTTP 392  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTKSLSPGK 232  
 DB 393 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTKSLSPGK 444

RESULT 101

AD000851

ID AD000851 standard; protein; 444 AA.

AC AD000851;

XX 29-JUL-2004 (first entry)

XX Humanised murine antibody BIWA 4 heavy chain protein SEQ ID NO:6.

XX CD44 specific antibody; CD44; cancer; radiotherapy;

KW CD44v6 specific antibody; maytansinoid; radioimmunotherapeutic;

KW cytostatic; immunostimulator; head and neck squamous cell carcinoma;

KW oesophagus squamous cell carcinoma; lung squamous cell carcinoma;  
 KW skin squamous cell carcinoma; cervix squamous cell carcinoma;  
 KW breast adenocarcinoma; lung adenocarcinoma; pancreas adenocarcinoma;  
 KW colon adenocarcinoma; stomach adenocarcinoma;  
 XX humanised murine antibody BIWA 4 heavy chain.

XX Mus sp.

OS Homo sapiens.

OS Synthetic.

XX EP1417974-A1.

XX 12-MAY-2004.

XX 08-NOV-2002; 2002EP-00024881.

XX 08-NOV-2002; 2002EP-00024881.

XX (BOEH ) BOEHRINGER INGELHEIM INT GMBH.

XX WPI; 2004-378705/36.

XX N-PSDB; AD000852.

XX Use of compound comprising antibody molecule specific for CD 44, linker  
 PT moiety and compound toxic to cells, in combination with radiotherapy for  
 PT preparation of pharmaceutical composition for treatment of cancer.

XX Claim 7; SEQ ID NO 6; 42pp; English.

XX The present invention describes using a compound (CD) of formula A(LB)n,  
 CC where A is an antibody molecule which is specific for CD44, L is a linker  
 CC moiety, B is a compound which is toxic to cells, and n is a decimal  
 CC number between 1-10, for the preparation of a pharmaceutical composition  
 CC for the treatment of cancer, where CD is used or is for use in  
 CC combination with radiotherapy. Also described: (1) use of a conjugate  
 CC (CJ) of a CD44v6 specific antibody molecule and a maytansinoid for the  
 CC manufacture of a pharmaceutical composition for the treatment of cancer,  
 CC where CJ is used or is for use in combination with radiotherapy; (2) a  
 CC pharmaceutical composition comprising CD or CJ together with a  
 CC radioimmunotherapeutic agent and optionally further comprising one or  
 CC more carrier(s), diluent(s), or excipient(s); (3) a kit comprising, in a  
 CC separate pharmaceutical composition, CD or CJ and a  
 CC radioimmunotherapeutic agent; and (4) use of radioimmunotherapeutic agent  
 CC (RA) for the preparation of a pharmaceutical composition for the  
 CC treatment of cancer, where the radioimmunotherapeutic agent is used or is  
 CC for use in combination with CD or CJ. CD and CJ have cytostatic  
 CC activities, and can be used as immunostimulators. CJ is useful for the  
 CC manufacture of a medicament for the treatment of cancer e.g. head and  
 CC neck squamous cell carcinoma, oesophagus squamous cell carcinoma, lung  
 CC squamous cell carcinoma, skin squamous cell carcinoma, cervix squamous  
 CC cell carcinoma, breast adenocarcinoma, lung adenocarcinoma, pancreas  
 CC adenocarcinoma, colon adenocarcinoma, and stomach adenocarcinoma. CD and  
 CC CJ are useful for preparation of a pharmaceutical composition for the  
 CC treatment of cancer. CD and CJ are useful for treating cancer in a  
 CC patient which involves administering CD or CJ to the patient in  
 CC combination with radiotherapy. CD and CJ are useful as an adjuvant to  
 CC surgical intervention, to treat minimal residual disease. The present  
 CC sequence represents a humanised murine antibody BIWA 4 heavy chain, which  
 CC is used in the exemplification of the present invention.

XX Sequence 444 AA;

Query Match 100.0%; Score 1263; DB 8; Length 444;

Best Local Similarity 100.0%; Pred. No. 3.3e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCCPPAPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

DB 213 EPKSCDKHTCCPPAPELGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 272

QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120

DB 273 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 332

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 333 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 392  
 QY 181 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232  
 DB 393 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 444  
 RESULT 102  
 ID AAY24153 standard; protein; 445 AA.  
 AC AAY24153;  
 DT 17-OCT-2003 (revised)  
 DT 10-SEP-1999 (first entry)  
 XX XX  
 DE Bovine LOX-1 extracellular region/human IgG1 Fc region chimeric protein.  
 KW LDL; denatured; oxidised; arteriosclerosis; hyperlipidaemia;  
 KW low density lipoprotein; receptor; detection; immunoglobulin;  
 KW fusion protein; chimeric protein.  
 XX Bos sp.  
 OS Homo sapiens.  
 OS Chimeric.  
 XX XX  
 PN W09932520-A1.  
 XX XX  
 PD 01-JUL-1999.  
 XX XX  
 PF 18-DEC-1998; 98WO-JF005744.  
 XX XX  
 PR 19-DEC-1997; 97JP-00364981.  
 PR 09-DEC-1998; 98JP-00349648.  
 PR 16-DEC-1998; 98JP-00358170.  
 XX XX  
 PA (NISR) JAPAN TOBACCO INC.  
 XX XX  
 PI Sawamura T, Kakutani M, Masaki T;  
 DR WPI; 1999-418906/35.  
 DR N-PSDB; AAX88529.  
 XX XX  
 PT Fusion peptide for assay of oxidized LDL and for therapeutic use.  
 PS Claim 12; Page 75-79; 105pp; Japanese.  
 XX XX  
 CC The present invention describes a fusion peptide which consists of the  
 CC extracellular domain of a mammalian oxidized LDL (low density  
 CC lipoprotein) receptor, fused to a partial heavy chain of a mammalian  
 CC immunoglobulin containing all or part of the constant region. Oxidized  
 CC LDL is a denatured form of LDL occurring in patients having  
 CC arteriosclerosis or hyperlipidaemia, and the fusion peptide can be used  
 CC for the assay of oxidized LDL in biological samples from such patients.  
 CC for the diagnosis of the disorders. It can also be used therapeutically  
 CC for the prevention and treatment of arteriosclerosis and hyperlipidaemia.  
 CC The present sequence represents a chimeric protein comprising the bovine  
 CC LOX-1 extracellular region and the human immunoglobulin IgG1 Fc region.  
 CC (Updated on 17-OCT-2003 to standardise OS field)  
 XX Sequence 445 AA;  
 SQ  
 Query Match 100.0%; Score 1263; DB 2; Length 445;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 214 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 273

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 274 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 333  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 393  
 QY 181 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232  
 DB 394 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 445  
 RESULT 103  
 ID AAO31101 standard; protein; 445 AA.  
 AC AAO31101;  
 XX XX  
 DT 06-OCT-2003 (first entry)  
 XX XX  
 DE Human A2-G8 SCF antibody heavy chain variable and constant region.  
 KW Human; antibody; stem cell factor; mast cell growth factor; asthma; SCF;  
 KW steel factor; c-kit ligand; gene therapy.  
 XX Homo sapiens.  
 OS OS  
 PN W02003051311-A2.  
 XX XX  
 PD 26-JUN-2003.  
 XX XX  
 PF 16-DEC-2002; 2002WO-US040227.  
 XX XX  
 PR 17-DEC-2001; 2001US-0342174P.  
 XX XX  
 PA (FARB) BAYER CORP.  
 XX XX  
 PI Takeuchi T, Tomkinson A, Neben S;  
 XX WPI; 2003-523500/49.  
 DR XX  
 PT New purified human antibody that binds to stem cell factor protein,  
 PT useful for preparing a composition for treating asthma.  
 XX XX  
 PS Claim 9; Page 47; 94pp; English.  
 XX XX  
 CC The invention provides human antibodies that bind to stem cell factor  
 CC (SCF) protein. SCF is also known as mast cell growth factor, steel factor  
 CC or c-kit ligand. Antibodies of the invention are useful for preparing  
 CC compositions for treating asthma. They are also used in gene therapy. The  
 CC present sequence is human SCF antibody heavy chain variable and constant  
 CC region  
 XX Sequence 445 AA;  
 SQ  
 Query Match 100.0%; Score 1263; DB 6; Length 445;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 214 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 273  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 274 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 333  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 393  
 QY 181 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232

Db 394 PVLSDSGSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNYTKLSLSPGK 445

RESULT 104

ADFI1421

ID ADFI1421 standard; protein; 445 AA.

XX AC ADFI1421;

XX DT 12-FEB-2004 (first entry)

XX DE 2B11 anti-OPGL antibody heavy chain SEQ ID NO:34.

XX KW human; antibody; osteoprotegerin ligand; OPGL; osteopenic disorder;

XX KW osteopathic; antiarthritic; cytostatic; gene therapy; bone disorder;

XX KW osteoporosis; bone loss; arthritis; Paget's disease; osteopenia.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

XX FT Misc-difference 140 /note= "encoded by TG"

XX XX WO2003086289-A2.

XX XX 23-OCT-2003.

XX XX 07-APR-2003; 2003WO-US010749.

XX XX 05-APR-2002; 2002US-0370407P.

XX PA (AMGE-) AMGEN INC.

XX PI Boyle WJ, Medlock E, Sullivan JK, Elliott RL, Martin F, Huang H;

XX DR WPI; 2003-845253/78.

XX DR N-PSDB; ADFI1420.

XX PT New isolated antibody that specifically binds osteoprotegerin ligand,

XX PT useful for diagnosing or treating bone disorders, such as osteoporosis,

XX PT bone loss from arthritis, Paget's disease or osteopenia.

XX PS Claim 13; SEQ ID NO 34; 156pp; English.

XX CC The present invention describes an isolated human antibody (I) that

XX CC specifically binds osteoprotegerin ligand (OPGL). Also described: (1) a

XX CC pharmaceutical composition comprising a pharmaceutical carrier and a

XX CC therapeutic amount of (I); (2) methods of treating an osteopenic disorder

XX CC in a patient, comprising administering to a patient the pharmaceutical

XX CC composition of (1) or a pharmaceutical amount of (I); and (3) a method

XX CC for detecting OPGL in a biological sample, comprising contacting the

XX CC sample with (I) under conditions that allow for binding of the antibody

XX CC to OPGL, and measuring the level of bound antibody in the sample. (I) has

XX CC osteopathic, antiarthritic and cytostatic activities, and can be used in

XX CC treating bone disorders, such as osteoporosis, bone loss from arthritis,

XX CC Paget's disease or osteopenia. The antibody (I) may also be used for

XX CC detecting OPGL in biological samples and in identifying cells or tissues

XX CC that produce the protein. The present sequence represents a sequence

XX CC which is used in the exemplification of the present invention.

XX SQ Sequence 445 AA;

Query Match 100.0%; Score 1263; DB 7; Length 445;

Best Local Similarity 100.0%; Pred. No. 3.3e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDTHCPCPAPBLGGSVFLFPKPKDMLMISTPTVCVVDVSHEDPEVKF 60

DB 214 EPKSCDTHCPCPAPBLGGSVFLFPKPKDMLMISTPTVCVVDVSHEDPEVKF 273

QY 61 NWYVDGVEVHNKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Db 274 NWYVDGVEVHNKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180

Db 334 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 393

QY 181 PVLSDSGSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNYTKLSLSPGK 232

Db 394 PVLSDSGSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNYTKLSLSPGK 445

RESULT 105

ADFI1429

ID ADFI1429 standard; protein; 445 AA.

XX AC ADFI1429;

XX DT 12-FEB-2004 (first entry)

XX DE 18B2 anti-OPGL antibody heavy chain SEQ ID NO:42.

XX KW human; antibody; osteoprotegerin ligand; OPGL; osteopenic disorder;

XX KW osteopathic; antiarthritic; cytostatic; gene therapy; bone disorder;

XX KW osteoporosis; bone loss; arthritis; Paget's disease; osteopenia.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

XX FT Misc-difference 140 /note= "encoded by TG"

XX XX WO2003086289-A2.

XX XX 23-OCT-2003.

XX XX 07-APR-2003; 2003WO-US010749.

XX XX 05-APR-2002; 2002US-0370407P.

XX PA (AMGE-) AMGEN INC.

XX PI Boyle WJ, Medlock E, Sullivan JK, Elliott RL, Martin F, Huang H;

XX DR WPI; 2003-845253/78.

XX DR N-PSDB; ADFI1428.

XX PT New isolated antibody that specifically binds osteoprotegerin ligand,

XX PT useful for diagnosing or treating bone disorders, such as osteoporosis,

XX PT bone loss from arthritis, Paget's disease or osteopenia.

XX PS Claim 13; SEQ ID NO 42; 156pp; English.

XX CC The present invention describes an isolated human antibody (I) that

XX CC specifically binds osteoprotegerin ligand (OPGL). Also described: (1) a

XX CC pharmaceutical composition comprising a pharmaceutical carrier and a

XX CC therapeutic amount of (I); (2) methods of treating an osteopenic disorder

XX CC in a patient, comprising administering to a patient the pharmaceutical

XX CC composition of (1) or a pharmaceutical amount of (I); and (3) a method

XX CC for detecting OPGL in a biological sample, comprising contacting the

XX CC sample with (I) under conditions that allow for binding of the antibody

XX CC to OPGL, and measuring the level of bound antibody in the sample. (I) has

XX CC osteopathic, antiarthritic and cytostatic activities, and can be used in

XX CC treating bone disorders, such as osteoporosis, bone loss from arthritis,

XX CC Paget's disease or osteopenia. The antibody (I) may also be used for

XX CC detecting OPGL in biological samples and in identifying cells or tissues

XX CC that produce the protein. The present sequence represents a sequence

XX CC which is used in the exemplification of the present invention.

XX SQ Sequence 445 AA;

Query Match 100.0%; Score 1263; DB 7; Length 445;

Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 214 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 273  
QY 61 NWYVDGVEVHNAKTKPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 274 NWYVDGVEVHNAKTKPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 393  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232  
DB 394 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 445

RESULT 106  
AAW05829  
ID AAW05829 standard; protein; 446 AA.  
XX  
AC AAW05829;  
XX  
DT 16-OCT-2003 (revised)  
DT 27-JAN-1997 (first entry)  
XX  
DE Humanised ID10 antibody heavy chain.  
XX  
KW B-cell lymphoma; humanised antibody; bispecific antibody; myeloma;  
KW leukaemia; hybridoma; monoclonal antibody.  
XX  
OS Homo; sapiens.  
OS Mus sp.  
OS Chimeric.  
XX  
FH Key Location/Qualifiers  
FT Domain 1. .116  
FT Region /label= Variable\_domain  
FT Region 31. .35 /label= CDR1  
FT Region 50. .65 /label= CDR2  
FT Region 98. .105 /label= CDR3  
FT Domain 117. .214 /label= CH1  
FT Domain 215. .229 /label= Hinge  
FT Domain 230. .339 /label= CH2  
FT Domain 340. .446 /label= CH3  
XX  
PN WO9626964-A1.  
XX  
PD 06-SEP-1996.  
XX  
PF 29-FEB-1996; 96WO-US002754.  
XX  
PR 01-MAR-1995; 95US-00397411.  
XX  
(PROT-) PROTEIN DESIGN LABS INC.  
PA (IOWA-) IOWA IMMUNOTHERAPY INVESTIGATORS.  
XX  
PI Weiner G, Gingrich R, Link BK, Tso JY;  
XX WPI; 1996-412742/41.  
XX  
PT New bi-specific antibody reactive with both T or NK cells and malignant B cells - also their humanised forms and hybridomas producing them, useful

PT for treating or preventing leukaemia, lymphoma and myeloma.  
XX Example 4; Fig 4e; 85pp; English.  
XX  
CC The humanised ID10 antibody heavy chain (AAW05829) includes a variable region (see also AAW05823) consisting of human R3.5HG heavy chain variable region framework and complementarity determining regions from the murine ID10 antibody specific for a 28/32 kDa antigen found on the surface of malignant B-cells. It can be coexpressed with humanised ID10 light chain (see also AAW05828) in mammalian host cells. Bispecific antibodies can be constructed that include a first binding fragment comprising humanised M291 heavy and light chain variable regions (see also AAW05826, AAW05830), and a second binding fragment comprising humanised ID10 heavy and light chain variable regions. Such antibodies are reactive with both T or NK cells and malignant B cells, and have therapeutic and diagnostic appins. (Updated on 16-OCT-2003 to standardise OS field)  
XX  
SQ Sequence 446 AA;  
Query Match 100.0%; Score 1263; DB 2; Length 446;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 215 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274  
QY 61 NWYVDGVEVHNAKTKPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 275 NWYVDGVEVHNAKTKPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 394  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232  
DB 395 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 446

RESULT 107  
ADF11425  
ID ADF11425 standard; protein; 446 AA.  
XX  
AC ADF11425;  
XX  
DT 12-FEB-2004 (first entry)  
XX  
DE 2D8 anti-OPGL antibody heavy chain SEQ ID NO:38.  
XX  
KW human; antibody; osteoprotegerin ligand; OPGL; osteopenic disorder;  
KW osteopathic; antiarthritic; cytostatic; gene therapy; bone disorder;  
KW osteoporosis; bone loss; arthritis; Paget's disease; osteopenia.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT Misc-difference 141 /note= "encoded by TG"  
FT  
XX  
PN WO2003086289-A2.  
XX  
PD 23-OCT-2003.  
XX  
PF 07-APR-2003; 2003WO-US010749.  
XX  
PR 05-APR-2002; 2002US-0370407P.  
XX  
PA (AMGE-) AMGEN INC.  
XX  
PI Boyle WJ, Medlock E, Sullivan JK, Elliott RL, Martin F, Huang H;  
XX

DR WPI; 2003-845253/78.  
XX N-PSDB; ADF11424.  
PT New isolated antibody that specifically binds osteoprotegerin ligand,  
PT useful for diagnosing or treating bone disorders, such as osteoporosis,  
PT bone loss from arthritis, Paget's disease or osteopenia.  
XX  
PS Claim 11; SEQ ID NO 38; 156pp; English.  
XX  
XX The present invention describes an isolated human antibody (I) that  
CC specifically binds osteoprotegerin ligand (OPGL). Also described: (1) a  
CC pharmaceutical composition comprising a pharmaceutical carrier and a  
CC therapeutic amount of (I); (2) methods of treating an osteopenic disorder  
CC in a patient, comprising administering to a patient the pharmaceutical  
CC composition of (1) or a pharmaceutical amount of (I); and (3) a method  
CC for detecting OPGL in a biological sample, comprising contacting the  
CC sample with (I) under conditions that allow for binding of the antibody  
CC to OPGL, and measuring the level of bound antibody in the sample. (I) has  
CC osteopathic, antiarthritic and cytostatic activities, and can be used in  
CC treating bone disorders, such as osteoporosis, bone loss from arthritis,  
CC Paget's disease or osteopenia. The antibody (I) may also be used for  
CC detecting OPGL in biological samples and in identifying cells or tissues  
CC that produce the protein. The present sequence represents a sequence  
CC which is used in the exemplification of the present invention.  
XX  
SQ Sequence 446 AA;  
Query Match 100.0%; Score 1263; DB 7; Length 446;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 215 EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 274  
QY 61 NWYDVGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 275 NWYDVGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 394  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 232  
DB 395 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 446  
RESULT 108  
ADFI1437  
XX ADFI1437 standard; protein; 446 AA.  
AC ADFI1437;  
XX  
DT 12-FEB-2004 (first entry)  
XX  
DE 9H7 anti-OPGL antibody heavy chain SEQ ID NO:50.  
XX  
XX human; antibody; osteoprotegerin ligand; OPGL; osteopenic disorder;  
KW osteopathic; antiarthritic; cytostatic; gene therapy; bone disorder;  
KW osteoporosis; bone loss; arthritis; Paget's disease; osteopenia.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT Misc-difference 141  
FT /note= "encoded by TG"  
XX  
PN W02003086289-A2.  
XX  
PD 23-OCT-2003.  
XX

PF 07-APR-2003; 2003WO-US010749.  
XX  
PR 05-APR-2002; 2002US-0370407P.  
XX  
PA (AMGE-) AMGEN INC.  
XX  
XX Boyle WJ, Medlock E, Sullivan JK, Elliott RL, Martin F, Huang H;  
PI WPI; 2003-845253/78.  
XX N-PSDB; ADF11436.  
DR  
XX  
XX New isolated antibody that specifically binds osteoprotegerin ligand,  
PT useful for diagnosing or treating bone disorders, such as osteoporosis,  
PT bone loss from arthritis, Paget's disease or osteopenia.  
XX  
PS Claim 11; SEQ ID NO 50; 156pp; English.  
XX  
XX The present invention describes an isolated human antibody (I) that  
CC specifically binds osteoprotegerin ligand (OPGL). Also described: (1) a  
CC pharmaceutical composition comprising a pharmaceutical carrier and a  
CC therapeutic amount of (I); (2) methods of treating an osteopenic disorder  
CC in a patient, comprising administering to a patient the pharmaceutical  
CC composition of (1) or a pharmaceutical amount of (I); and (3) a method  
CC for detecting OPGL in a biological sample, comprising contacting the  
CC sample with (I) under conditions that allow for binding of the antibody  
CC to OPGL, and measuring the level of bound antibody in the sample. (I) has  
CC osteopathic, antiarthritic and cytostatic activities, and can be used in  
CC treating bone disorders, such as osteoporosis, bone loss from arthritis,  
CC Paget's disease or osteopenia. The antibody (I) may also be used for  
CC detecting OPGL in biological samples and in identifying cells or tissues  
CC that produce the protein. The present sequence represents a sequence  
CC which is used in the exemplification of the present invention.  
XX  
SQ Sequence 446 AA;  
Query Match 100.0%; Score 1263; DB 7; Length 446;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 215 EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 274  
QY 61 NWYDVGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 275 NWYDVGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 394  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 232  
DB 395 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 446  
RESULT 109  
ADFI1433  
ID ADFI1433 standard; protein; 446 AA.  
XX  
XX ADFI1433;  
XX  
DT 12-FEB-2004 (first entry)  
XX  
DE 16E1 anti-OPGL antibody heavy chain SEQ ID NO:46.  
XX  
XX human; antibody; osteoprotegerin ligand; OPGL; osteopenic disorder;  
KW osteopathic; antiarthritic; cytostatic; gene therapy; bone disorder;  
KW osteoporosis; bone loss; arthritis; Paget's disease; osteopenia.  
XX  
XX Homo sapiens.  
XX

FH Key Location/Qualifiers  
 FT Misc-difference 141  
 XX /note= "encoded by TG"  
 XX WO2003086289-A2.  
 XX 23-OCT-2003.  
 XX 07-APR-2003; 2003WO-US010749.  
 XX 05-APR-2002; 2002US-0370407P.  
 XX (AMGE-) AMGEN INC.  
 XX Boyle WJ, Medlock E, Sullivan JK, Elliott RL, Martin F, Huang H;  
 XX WPI; 2003-845253/78.  
 XX N-PSDB; ADF11432.  
 XX New isolated antibody that specifically binds osteoprotegerin ligand,  
 PT useful for diagnosing or treating bone disorders, such as osteoporosis,  
 PT bone loss from arthritis, Paget's disease or osteopenia.  
 XX Claim 11; SEQ ID NO 46; 156pp; English.  
 XX The present invention describes an isolated human antibody (I) that  
 CC specifically binds osteoprotegerin ligand (OPGL). Also described: (1) a  
 CC pharmaceutical composition comprising a pharmaceutical carrier and a  
 CC therapeutic amount of (1); (2) methods of treating an osteopenic disorder  
 CC in a patient, comprising administering to a patient the pharmaceutical  
 CC composition of (1) or a pharmaceutical amount of (1); and (3) a method  
 CC for detecting OPGL in a biological sample, comprising contacting the  
 CC sample with (1) under conditions that allow for binding of the antibody  
 CC to OPGL, and measuring the level of bound antibody in the sample. (1) has  
 CC osteopathic, antiarthritic and cytostatic activities, and can be used in  
 CC gene therapy. The composition and methods are useful in diagnosing or  
 CC treating bone disorders, such as osteoporosis, bone loss from arthritis,  
 CC Paget's disease or osteopenia. The antibody (I) may also be used for  
 CC detecting OPGL in biological samples and in identifying cells or tissues  
 CC that produce the protein. The present sequence represents a sequence  
 CC which is used in the exemplification of the present invention.  
 XX  
 SQ Sequence 446 AA;  
 Query Match 100.0%; Score 1263; DB 7; Length 446;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 215 EPKCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274  
 QY 61 NWYVDGVEVHNAKTPREEQNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120  
 DB 275 NWYVDGVEVHNAKTPREEQNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 334  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 394  
 QY 181 PVLDSGDSFFLYSKLTVDKSRWQOGNVFSCSWMEALHNHYTQKSLSLSPGK 232  
 DB 395 PVLDSGDSFFLYSKLTVDKSRWQOGNVFSCSWMEALHNHYTQKSLSLSPGK 446  
 RESULT 110  
 ADF11417  
 ID ADF11417 standard; protein; 446 AA.  
 XX ADF11417;  
 XX 12-FEB-2004 (first entry)  
 DT  
 XX

DE 22B3 anti-OPGL antibody heavy chain SEQ ID NO:30.  
 XX human; antibody; osteoprotegerin ligand; OPGL; osteopenic disorder;  
 KW osteopathic; antiarthritic; cytostatic; gene therapy; bone disorder;  
 KW osteoporosis; bone loss; arthritis; Paget's disease; osteopenia.  
 XX Homo sapiens.  
 XX Key Location/Qualifiers  
 FH Misc-difference 141  
 FT /note= "encoded by TG"  
 XX WO2003086289-A2.  
 XX 23-OCT-2003.  
 XX 07-APR-2003; 2003WO-US010749.  
 XX 05-APR-2002; 2002US-0370407P.  
 XX (AMGE-) AMGEN INC.  
 XX Boyle WJ, Medlock E, Sullivan JK, Elliott RL, Martin F, Huang H;  
 XX WPI; 2003-845253/78.  
 XX N-PSDB; ADF11416.  
 XX New isolated antibody that specifically binds osteoprotegerin ligand,  
 PT useful for diagnosing or treating bone disorders, such as osteoporosis,  
 PT bone loss from arthritis, Paget's disease or osteopenia.  
 XX Claim 11; SEQ ID NO 30; 156pp; English.  
 XX The present invention describes an isolated human antibody (I) that  
 CC specifically binds osteoprotegerin ligand (OPGL). Also described: (1) a  
 CC pharmaceutical composition comprising a pharmaceutical carrier and a  
 CC therapeutic amount of (1); (2) methods of treating an osteopenic disorder  
 CC in a patient, comprising administering to a patient the pharmaceutical  
 CC composition of (1) or a pharmaceutical amount of (1); and (3) a method  
 CC for detecting OPGL in a biological sample, comprising contacting the  
 CC sample with (1) under conditions that allow for binding of the antibody  
 CC to OPGL, and measuring the level of bound antibody in the sample. (1) has  
 CC osteopathic, antiarthritic and cytostatic activities, and can be used in  
 CC gene therapy. The composition and methods are useful in diagnosing or  
 CC treating bone disorders, such as osteoporosis, bone loss from arthritis,  
 CC Paget's disease or osteopenia. The antibody (I) may also be used for  
 CC detecting OPGL in biological samples and in identifying cells or tissues  
 CC that produce the protein. The present sequence represents a sequence  
 CC which is used in the exemplification of the present invention.  
 XX  
 SQ Sequence 446 AA;  
 Query Match 100.0%; Score 1263; DB 7; Length 446;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 215 EPKCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274  
 QY 61 NWYVDGVEVHNAKTPREEQNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120  
 DB 275 NWYVDGVEVHNAKTPREEQNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 334  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 394  
 QY 181 PVLDSGDSFFLYSKLTVDKSRWQOGNVFSCSWMEALHNHYTQKSLSLSPGK 232  
 DB 395 PVLDSGDSFFLYSKLTVDKSRWQOGNVFSCSWMEALHNHYTQKSLSLSPGK 446

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RESULT 111
ADRI9328
ID ADR19328 standard; protein; 446 AA.
XX AC ADR19328;
XX DT 21-OCT-2004 (first entry)
XX DE Chimeric mouse/human antibody IgG1 gamma heavy chain, cIgG-Pankoz.
XX Recognition molecule; bind: glycosylated MUC1 tumour epitope; mucin 1;
XX KW tumour; metastatic; carcinoma; breast; colon; stomach; pancreas; ovary;
XX KW liver; kidney cell; intestinal; lung cancer; multiple myeloma; murine;
XX KW mouse; human; heavy chain; gamma; chimeric.
XX OS Mus sp.
XX OS Homo sapiens.
XX PN WO2004065423-A2.
XX PD 05-AUG-2004.
XX PF 23-JAN-2004; 2004WO-DE000132.
XX PR 23-JAN-2003; 2003DE-01003664.
XX PA (NEMO-) NEMOD BIOTHERAPEUTICS GMBH & CO KG.
XX PI Goletz S, Danielczyk A, Stahn R, Karsten U;
XX DT WPI; 2004-593433/57.
XX PT New recognition molecules that bind the glycosylated MUC1 tumor epitope,
XX useful for prevention, diagnosis, treatment and monitoring of tumors.
XX PS Claim 29; SEQ ID NO 65; 158pp; German.
XX
CC The invention relates to novel recognition molecules comprising sequences
CC that bind specifically to a glycosylated MUC1 tumour epitope. The novel
CC recognition molecules comprise: sequences ADR19264 and ADR19265; sequences
CC ADR19266 or ADR19267 and sequences ADR19268 and ADR19269, and bind
CC specifically to the glycosylated mucin 1 (MUC1) tumour epitope. The
CC invention further comprises: a construct comprising the recognition
CC molecule fused, chemically coupled or non-covalently associated with
CC additional sequences and/or structures; an isolated nucleic acid that
CC encodes the recognition molecule or construct; expression cassette or
CC vector that contains the isolated nucleic acid, operatively linked to a
CC promoter; virus or host cell comprising at least one cassette or vector
CC of ADR19266; an organism containing at least one host cell of ADR19267; a
CC method for preparing the recognition molecule and construct; and a kit
CC containing the recognition molecule and/or construct. The recognition
CC molecules have cytostatic activity. The recognition molecules, constructs
CC containing them, the nucleic acid encoding them, and derived viruses,
CC cells and organisms, are used for prevention, diagnosis, treatment and
CC monitoring of tumours and/or metastases, specifically where MUC1
CC positive, particularly carcinoma of breast, colon, stomach, pancreas,
CC ovary, liver or kidney cells; (gastro)intestinal or lung cancers and
CC multiple myeloma. The recognition molecules show little or no binding to
CC MUC1 in either the serum or normal tissue, so provides simple, safe and
CC efficient detection of tumours, even at an early stage (carcinoma in
CC situ), and can differentiate between tumours and benign diseases. This
CC sequence represents a chimeric murine/human antibody chain used in the
CC creation of the novel recognition molecules of the invention.
XX SQ Sequence 446 AA;

Query Match 100.0%; Score 1263; DB 8; Length 446;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDPTLMISRTPTVTCVVDVSHEDPEVKF 60
DB 215 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDPTLMISRTPTVTCVVDVSHEDPEVKF 274

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QY 61 NMVVDGVEVHNAKTKPRBEQYNSTYRVVSVLTVTHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 275 NMVVDGVEVHNAKTKPRBEQYNSTYRVVSVLTVTHQDWLNGKEYKCKVSNKALPAPIEKT 334
QY 121 ISKAKQPREPQVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEVESNGQPENNYKTTTP 180
DB 335 ISKAKQPREPQVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEVESNGQPENNYKTTTP 394
QY 181 PVLDSGSPFLYSKLTVDKSRWQOQNVFSCVMHEALHNHYTOKSLSLSPGK 232
DB 395 PVLDSGSPFLYSKLTVDKSRWQOQNVFSCVMHEALHNHYTOKSLSLSPGK 446

RESULT 112
AAV31669
ID AAY31669 standard; protein; 447 AA.
XX AC AAY31669;
XX DT 09-NOV-1999 (first entry)
XX DE Human IgG1 chain C.
XX KW IgG1; C-gamma-1; antibody; fusion protein; circulating half-life; human;
XX drug delivery.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT Misc-difference 1..117 /note= "the identity of these residues is not specified"
XX PN WO9943713-A1.
XX PD 02-SEP-1999.
XX PF 24-FEB-1999; 99WO-US003966.
XX PR 25-FEB-1998; 98US-0075887P.
XX PA (LEXI-) LEXIGEN PHARM CORP.
XX PI Gillies SD, Lo K, Lan Y, Wesolowski J;
XX DT WPI; 1999-527594/44.
XX PT New antibody-based fusion proteins, used for the delivery of e.g. a
XX cytokine, ligand-binding protein or protein toxin to target cells in
XX vivo.
XX PS Disclosure; Page 31-32; 41pp; English.
XX
CC The present sequence represents the constant region of human IgG isotype
CC 1 (IgG1, C-gamma-1). C-gamma-1 and C-gamma-3 (see AAY31671) bind Fc
CC receptors with high affinity, whereas C-gamma-4 (see AAY31672) has 10-
CC fold lower binding affinity and C-gamma-2 (see AAY31670) does not bind to
CC Fc receptor gamma-1. The invention provides methods for the genetic
CC construction and expression of antibody-based fusion proteins with
CC enhanced circulating half-lives. The fusion proteins lack the ability to
CC bind to immunoglobulin Fc receptors, either as a consequence of the
CC antibody isotype used for protein construction, i.e. a C-gamma-2 constant
CC region (Fc) or a C-gamma-4 Fc receptor, or through directed mutagenesis
CC of antibody isotypes that normally bind Fc receptors, i.e. C-gamma-1 or C
CC -gamma-3. Introduction of a mutation or a deletion at one or more amino
CC acid of C-gamma-1 selected from Leu234, Leu235, Gly236, Gly237, Asn297,
CC and Pro331, produces an Ig heavy chain having reduced binding affinity
CC for an Fc receptor. The methods can be used for increasing the
CC circulating half-life of a non-Ig protein such as a cytokine, e.g. tumour
CC necrosis factor (TNF), an interleukin or a lymphokine such as a
CC lymphotoxin or a colony stimulating factor, a ligand-binding protein,
CC e.g. CD4, CTLA-4, TNF receptor or an interleukin receptor, or a protein
CC toxin (claimed). The fusion proteins are used to deliver selectively the

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CC second non-Ig protein to a target cell in vivo so that the second non-Ig  
 CC protein can exert a localised biological effect  
 XX  
 SQ Sequence 447 AA;

Query Match 100.0%; Score 1263; DB 2; Length 447;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 216 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 275  
 QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120  
 DB 276 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 335  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 395  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVHREALHNHYTKLSLSPGK 232  
 DB 396 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVHREALHNHYTKLSLSPGK 447

RESULT 113  
 ADL35333  
 ID ADL35333 standard; protein; 447 AA.  
 AC ADL35333;  
 DT 20-MAY-2004 (first entry)  
 DE Human anti-Fc-gamma receptor IIIa antibody-related protein - SEQ 90.  
 KW antibody binding; Fc-gamma receptor IIIa; Fc region sugar chain;  
 KW cytostatic; anti-allergic; anti-inflammatory; immunosuppressive;  
 KW vasotropic; virucide; cancer; allergy; inflammatory; autoimmune;  
 KW circulatory; viral infection; human.  
 OS Homo sapiens.  
 XX WO2003085119-A1.  
 XX 16-OCT-2003.  
 XX 09-APR-2003; 2003WO-JP004504.  
 XX 09-APR-2002; 2002JP-00106950.  
 XX (KYOW ) KYOWA HAKKO KOGYO KK.  
 XX Nakamura K, Shitara K;  
 XX WPI; 2003-812729/76.  
 XX N-PSDB; ADL35332.  
 XX Method of enhancing the binding activity of antibody to Fc-gamma receptor  
 PT IIIa for production of antibodies with high cytotoxicity as cancer,  
 PT allergic, viral and other disease therapeutic agents.  
 XX Example 14; SEQ ID NO 90; 296pp; Japanese.

CC The invention relates to a novel method for enhancing the binding  
 CC activity of an antibody to the Fc-gamma receptor IIIa by increasing the  
 CC proportion of N-glycoside bond type complex sugar chains attached to the  
 CC Fc region of the antibody which do not have the 1-position of fucose  
 CC bound to the 6-position of N-acetylglucosamine at the reducing end of the  
 CC sugar chain. The method of the invention has cytostatic, anti-allergic,  
 CC anti-inflammatory, immunosuppressive, vasotropic and virucide applications  
 CC and may be useful for generating antibodies to be used in the treatment,  
 CC prevention and diagnosis of diseases including cancer, allergies,

CC inflammatory disorders, autoimmune diseases, circulatory disorders and  
 CC viral infections. The current sequence is that of an anti-Fc-gamma  
 CC receptor IIIa antibody-related protein of the invention.  
 XX  
 SQ Sequence 447 AA;

Query Match 100.0%; Score 1263; DB 7; Length 447;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 216 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 275  
 QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120  
 DB 276 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 335  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 395  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVHREALHNHYTKLSLSPGK 232  
 DB 396 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVHREALHNHYTKLSLSPGK 447

RESULT 114  
 ADQ31274  
 ID ADQ31274 standard; protein; 447 AA.  
 AC ADQ31274;  
 DT 09-SEP-2004 (first entry)  
 DE Humanised murine 11K2 heavy chain antibody protein (version 1) SeqID 40.  
 KW 11K2; monocyte chemotactic protein; beta-chemokine family;  
 KW glomerulonephritis; scleroderma; cirrhosis; multiple sclerosis;  
 KW lupus nephritis; atherosclerosis; inflammatory bowel disease;  
 KW rheumatoid arthritis; inflammatory disease; fibrotic disorder; cancer;  
 KW immunopathological disorder; antiarteriosclerotic; antiarthritic;  
 KW anti-inflammatory; anti-rheumatic; cytostatic; dermatological;  
 KW hepatotropic; immunomodulator; nephrotropic; neuroprotective; mouse; MCP;  
 KW murine; humanised antibody.  
 XX Mus musculus.  
 OS Synthetic.  
 XX WO2004050836-A2.  
 XX 17-JUN-2004.  
 XX 25-NOV-2003; 2003WO-US037834.  
 XX 27-NOV-2002; 2002US-0430007P.  
 XX (BIOG-) BIOGEN IDEC MA INC.  
 XX De Fougereolles AR, Kotelianski VE, Garber E, Reid C, Saldanha JW;  
 PI Van Vlijmen H;  
 XX WPI; 2004-461110/43.  
 XX N-PSDB; ADQ31273.  
 XX New antibodies against monocyte chemotactic proteins (MCP), useful for  
 PT treating or preventing disorders associated with detrimental MCP  
 PT activity, e.g. glomerulonephritis, scleroderma, multiple sclerosis, or  
 PT atherosclerosis.  
 XX Disclosure; SEQ ID NO 40; 200pp; English.  
 PS This invention relates to an antibody for treating or preventing  
 CC

disorders associated with detrimental monocyte chemotactic protein (MCP) activity. Specifically, it refers to humanised antibodies that bind to members of the beta-chemokine family (of which MCP-1, MCP-2 and MCP-3 belong) and in particular antibodies that have been modelled on, and modified from, the variable complementarity determining regions (CDRs) of the murine 11K2 and 1A1 immunoglobulin sequences. The present invention describes using these antibodies to treat or prevent diseases and disorders including glomerulonephritis, scleroderma, cirrhosis, multiple sclerosis, lupus nephritis, atherosclerosis, inflammatory bowel diseases, rheumatoid arthritis, inflammatory diseases, fibrotic disorders, cancer, and immunopathological disorders. Accordingly, they can be used in the development of pharmaceutical compositions that exhibit antiarteriosclerotic, antiarthritic, antiinflammatory, antirheumatic, cytostatic, dermatological, hepatotropic, immunomodulator, nephrotropic and neuroprotective activities. This polypeptide sequence is the humanised murine 11K2 variable and constant heavy chain antibody protein (version 1) of the invention.

Sequence 447 AA;

Query Match 100.0%; Score 1263; DB 8; Length 447;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 216 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 275  
QY 61 NMYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 120  
DB 276 NMYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 335  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFPYPSDIAVEVESNGQPENNYKTP 180  
DB 336 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFPYPSDIAVEVESNGQPENNYKTP 395  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMVHEALHNHYTKSLSPGK 232  
DB 396 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMVHEALHNHYTKSLSPGK 447

RESULT 115

ID ADQ31271  
AC ADQ31271; standard; protein; 447 AA.

QY 09-SEP-2004 (first entry)  
DE Murine 11K2 variable & constant heavy chain antibody protein SeqID 37.  
KW 11K2; monocyte chemotactic protein; beta-chemokine family;  
KW glomerulonephritis; scleroderma; cirrhosis; multiple sclerosis;  
KW lupus nephritis; atherosclerosis; inflammatory bowel disease;  
KW rheumatoid arthritis; inflammatory disease; fibrotic disorder; cancer;  
KW immunopathological disorder; antiarteriosclerotic; antiarthritic;  
KW antiinflammatory; antirheumatic; cytostatic; dermatological;  
KW hepatotropic; immunomodulator; nephrotropic; neuroprotective; mouse; MCP;  
KW murine; antibody.

Mus musculus.

WO2004050836-A2.

17-JUN-2004.

25-NOV-2003; 2003WO-US037834.

27-NOV-2002; 2002US-0430007P.

(BIOG-) BIOGEN IDEC MA INC.

De Fougereolles AR, Kotelianski VE, Garber E, Reid C, Saldanha JW;

PI Van Vlijmen H;

XX WPI; 2004-461110/43.

DR N-PSDB; ADQ31269.

XX New antibodies against monocyte chemotactic proteins (MCP), useful for treating or preventing disorders associated with detrimental MCP activity, e.g. glomerulonephritis, scleroderma, multiple sclerosis, or atherosclerosis.

PS Disclosure; SEQ ID NO 37; 200pp; English.

XX This invention relates to an antibody for treating or preventing disorders associated with detrimental monocyte chemotactic protein (MCP) activity. Specifically, it refers to humanised antibodies that bind to members of the beta-chemokine family (of which MCP-1, MCP-2 and MCP-3 belong) and in particular antibodies that have been modelled on, and modified from, the variable complementarity determining regions (CDRs) of the murine 11K2 and 1A1 immunoglobulin sequences. The present invention describes using these antibodies to treat or prevent diseases and disorders including glomerulonephritis, scleroderma, cirrhosis, multiple sclerosis, lupus nephritis, atherosclerosis, inflammatory bowel diseases, rheumatoid arthritis, inflammatory diseases, fibrotic disorders, cancer, and immunopathological disorders. Accordingly, they can be used in the development of pharmaceutical compositions that exhibit antiarteriosclerotic, antiarthritic, antiinflammatory, antirheumatic, cytostatic, dermatological, hepatotropic, immunomodulator, nephrotropic and neuroprotective activities. This polypeptide sequence is the murine 11K2 variable and constant domains heavy chain antibody protein of the invention.

Sequence 447 AA;

Query Match 100.0%; Score 1263; DB 8; Length 447;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 216 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 275  
QY 61 NMYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 120  
DB 276 NMYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 335  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFPYPSDIAVEVESNGQPENNYKTP 180  
DB 336 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFPYPSDIAVEVESNGQPENNYKTP 395  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMVHEALHNHYTKSLSPGK 232  
DB 396 PVLDSGSPFLYSLKLTVDKSRWQGNVFCVSMVHEALHNHYTKSLSPGK 447

RESULT 116

ADQ31276

ID ADQ31276 standard; protein; 447 AA.

AC ADQ31276;

09-SEP-2004 (first entry)

Humanised murine 11K2 heavy chain antibody protein (version 2) SeqID 42.

11K2; monocyte chemotactic protein; beta-chemokine family;

glomerulonephritis; scleroderma; cirrhosis; multiple sclerosis;

lupus nephritis; atherosclerosis; inflammatory bowel disease;

rheumatoid arthritis; inflammatory disease; fibrotic disorder; cancer;

immunopathological disorder; antiarteriosclerotic; antiarthritic;

antiinflammatory; antirheumatic; cytostatic; dermatological;

hepatotropic; immunomodulator; nephrotropic; neuroprotective; mouse; MCP;

murine; humanised antibody.

OS Mus musculus.  
 OS Synthetic.  
 XX WO2004050836-A2.  
 XX 17-JUN-2004.  
 XX 25-NOV-2003; 2003WO-US037834.  
 XX 27-NOV-2002; 2002US-0430007P.  
 XX (BIOG-) BIOGEN IDEC WA INC.  
 XX De Fougereolles AR, Kotelianski VE, Garber E, Reid C, Saldanha JW;  
 XX Van Vlijmen H;  
 XX WPI; 2004-461110/43.  
 XX N-PSDB; ADQ31275.  
 XX New antibodies against monocyte chemotactic proteins (MCP), useful for  
 PT treating or preventing disorders associated with detrimental MCP  
 PT activity, e.g. glomerulonephritis, scleroderma, multiple sclerosis, or  
 PT atherosclerosis.  
 XX Disclosure; SEQ ID NO 42; 200pp; English.  
 XX This invention relates to an antibody for treating or preventing  
 CC disorders associated with detrimental monocyte chemotactic protein (MCP)  
 CC activity. Specifically, it refers to humanised antibodies that bind to  
 CC members of the beta-chemokine family (of which MCP-1, MCP-2 and MCP-3  
 CC belong) and in particular antibodies that have been modelled on, and  
 CC modified from, the variable complementarity determining regions (CDRs) of  
 CC the murine 11K2 and 1A1 immunoglobulin sequences. The present invention  
 CC describes using these antibodies to treat or prevent diseases and  
 CC disorders including glomerulonephritis, scleroderma, cirrhosis, multiple  
 CC sclerosis, lupus nephritis, atherosclerosis, inflammatory bowel diseases,  
 CC rheumatoid arthritis, inflammatory diseases, fibrotic disorders, cancer  
 CC and immunopathological disorders. Accordingly, they can be used in the  
 CC development of pharmaceutical compositions that exhibit  
 CC antiarteriosclerotic, antiarthritic, antiinflammatory, antirheumatic,  
 CC cytotatic, dermatological, hepatotropic, immunomodulator, nephrotropic  
 CC and neuroprotective activities. This polypeptide sequence is the  
 CC humanised murine 11K2 variable and constant heavy chain antibody protein  
 CC (version 2) of the invention.  
 XX Sequence 447 AA;  
 SQ  
 Query Match 100.0%; Score 1263; DB 8; Length 447;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 275  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 276 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335  
 QY 121 ISKAKGQPREPPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 Db 336 ISKAKGQPREPPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 395  
 QY 181 PVLDSGSGSFYLSKLTVDKSRWQGNVFCSVNHEALHNHYTQKSLSLSPGK 232  
 Db 396 PVLDSGSGSFYLSKLTVDKSRWQGNVFCSVNHEALHNHYTQKSLSLSPGK 447  
 RESULT 117  
 ADQ66378  
 ID ADQ66378 standard; protein; 447 AA.  
 XX  
 AC ADQ66378;

XX 07-OCT-2004 (first entry)  
 XX Novel human protein sequence #1351.  
 DE osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;  
 XX gene therapy; diagnostic marker; morbid state; osteoporosis;  
 KW neurological disease; Alzheimer's disease; Parkinson's disease; dementia;  
 KW cancer.  
 XX Homo sapiens.  
 OS EP1440981-A2.  
 XX 28-JUL-2004.  
 XX 21-JAN-2004; 2004EP-00001196.  
 XX 21-JAN-2003; 2003JP-00102206.  
 PR 09-MAY-2003; 2003JP-00131392.  
 XX (REAS-) RES ASSOC BIOTECHNOLOGY.  
 XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;  
 PI Yamamoto J, Isono Y, Nagai K, Irie R;  
 XX WPI; 2004-535376/52.  
 DR N-PSDB; ADQ64190.  
 XX Novel 2495 cDNA, useful for treating osteoporosis, neurological diseases,  
 PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.  
 XX Claim 1; SEQ ID NO 3539; 2449pp; English.  
 XX The invention relates to 2495 novel polynucleotides (1) and their encoded  
 CC polypeptides, sequences hybridizing to these nucleotides, sequences  
 CC encoding partial polypeptides and sequences having 70% or 90% identity to  
 CC the nucleotide and protein sequences. The nucleotides and polypeptides  
 CC are useful as diagnostic markers or therapeutic target for the diseases  
 CC or morbid states. They are also useful for treating osteoporosis,  
 CC neurological diseases, Alzheimer's diseases, Parkinson's diseases,  
 CC dementia and various cancers. This sequence corresponds to a protein  
 CC sequence of the invention.  
 XX Sequence 447 AA;  
 SQ  
 Query Match 100.0%; Score 1263; DB 8; Length 447;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 275  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 276 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335  
 QY 121 ISKAKGQPREPPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 Db 336 ISKAKGQPREPPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 395  
 QY 181 PVLDSGSGSFYLSKLTVDKSRWQGNVFCSVNHEALHNHYTQKSLSLSPGK 232  
 Db 396 PVLDSGSGSFYLSKLTVDKSRWQGNVFCSVNHEALHNHYTQKSLSLSPGK 447  
 RESULT 118  
 ADRI9327  
 ID ADRI9327 standard; protein; 447 AA.  
 XX  
 AC ADRI9327;  
 XX

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DT 21-OCT-2004 (first entry)
XX Chimeric mouse/human antibody IgG1 gamma heavy chain, cIGG-Pankol.
XX Recognition molecule; bind; glycosylated MUC1 tumour epitope; mucin 1;
XX tumour; metastatic; carcinoma; breast; colon; stomach; pancreas; ovary;
XX liver; kidney cell; intestinal; lung cancer; multiple myeloma; murine;
XX mouse; human; heavy chain; gamma; chimeric.
XX
XX Mus sp.
XX Homo sapiens.
XX
XX WO2004065423-A2.
XX
XX 05-AUG-2004.
XX
XX 23-JAN-2004; 2004WO-DR000132.
XX
XX 23-JAN-2003; 2003DE-01003664.
XX (NEMO-) NEMOD BIOTHERAPEUTICS GMBH & CO KG.
XX
XX Goletz S, Danielczyk A, Stahn R, Karsten U;
XX
XX WPI; 2004-593433/57.
XX
XX New recognition molecules that bind the glycosylated MUC1 tumor epitope,
XX useful for prevention, diagnosis, treatment and monitoring of tumors.
XX
XX Claim 28; SEQ ID NO 64; 158pp; German.
XX
XX The invention relates to novel recognition molecules comprising sequences
XX that bind specifically to a glycosylated MUC1 tumour epitope. The novel
XX recognition molecules comprise: sequences ADR19264 or ADR19265; sequences
XX ADR19266 or ADR19267 and sequences ADR19268 and ADR19269; and bind
XX specifically to the glycosylated mucin 1 (MUC1) tumour epitope. The
XX invention further comprises: a construct comprising the recognition
XX molecule fused, chemically coupled or non-covalently associated with
XX additional sequences and/or structures; an isolated nucleic acid that
XX encodes the recognition molecule or construct; expression cassette or
XX vector that contains the isolated nucleic acid, operatively linked to a
XX promoter; virus or host cell comprising at least one cassette or vector
XX of ADR19266; an organism containing at least one host cell of ADR19267; a
XX method for preparing the recognition molecule and construct; and a kit
XX containing the recognition molecule and/or construct. The recognition
XX molecules have cytostatic activity. The recognition molecules, constructs
XX containing them, the nucleic acid encoding them, and derived viruses,
XX cells and organisms, are used for prevention, diagnosis, treatment and
XX monitoring of tumours and/or metastases, specifically where MUC1
XX positive, particularly carcinoma of breast, colon, stomach, pancreas,
XX ovary, liver or kidney cells; (gastro)intestinal or lung cancers and
XX multiple myeloma. The recognition molecules show little or no binding to
XX MUC1 in either the serum or normal tissue, so provides simple, safe and
XX efficient detection of tumours, even at an early stage (carcinoma in
XX situ), and can differentiate between tumours and benign diseases. This
XX sequence represents a chimeric murine/human antibody chain used in the
XX creation of the novel recognition molecules of the invention.
XX
XX Query Match 100.0%; Score 1263; DB 8; Length 447;
XX Best Local Similarity 100.0%; Pred. No. 3.3e-91;
XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
XX
XX 216 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 275
XX
XX 61 NWYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
XX
XX 276 NWYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335
XX
XX 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEGSENGQPENNYKTP 180

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Db 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEGSENGQPENNYKTP 395
QY 181 PVLDSGDSFLLSKLTVDKSRWQGNVFCSCVWHEALHNHYTKSLSPGK 232
Db 396 PVLDSGDSFLLSKLTVDKSRWQGNVFCSCVWHEALHNHYTKSLSPGK 447
RESULT 119
ADS87928
ID ADS87928 standard; protein; 447 AA.
XX
XX ADS87928;
XX
XX 18-NOV-2004 (first entry)
XX
XX Anti-IFN-gamma antibody 1121 or 1121* heavy chain SEQ ID NO:21.
XX
XX antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
XX anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
XX antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
XX gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
XX multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
XX myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
XX systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
XX vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
XX immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX
XX Homo sapiens.
XX
XX WO2004034988-A2.
XX
XX 29-APR-2004.
XX
XX 14-OCT-2003; 2003WO-US032678.
XX
XX 16-OCT-2002; 2002US-0419057P.
XX
XX 17-JUN-2003; 2003US-0479241P.
XX
XX (AMGE-) AMGEN INC.
XX
XX Welcher A, Chute H, Li L, Huang H;
XX
XX WPI; 2004-348323/32.
XX
XX New antibody that binds specifically to IFN-gamma and comprising a heavy
XX chain CD83, useful in preparing a composition for treating IFN-gamma
XX mediated diseases e.g., AIDS, psoriasis, myasthenia gravis, cirrhosis or
XX atherosclerosis.
XX
XX Claim 12; SEQ ID NO 21; 115pp; English.
XX
XX The present invention describes an isolated antibody which binds
XX specifically to interferon (IFN)-gamma and comprises a heavy chain
XX complementarity determining region (CDR) 3 having a sequence comprising
XX at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36
XX (ADS87943) in the same order and spacing, or an amino acid sequence of
XX SEQ ID NO:37 (ADS87944). Also described: (1) an isolated polynucleotide
XX encoding the antibody; (2) a method of treating an IFN-gamma mediated
XX disease; and (3) a composition comprising a carrier and the antibody. The
XX IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-
XX HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and
XX antidiabetic activities, and can be used in gene therapy. The antibody is
XX useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid
XX arthritis, inflammatory bowel disease, multiple sclerosis, Addison's
XX disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus
XX nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,
XX Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome
XX or haemolytic anaemia. The present sequence represents an immunoglobulin
XX G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the
XX exemplification of the present invention.
XX
XX Sequence 447 AA;

```

Query Match 100.0%; Score 1263; DB 8; Length 447;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 216 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 275

QY 61 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 276 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 335

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
 DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232  
 DB 396 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 447

RESULT 120  
 ADS87924  
 ID ADS87924 standard; protein; 447 AA.  
 AC ADS87924;  
 XX  
 XX  
 DT 18-NOV-2004 (first entry)  
 DE  
 DE Anti-IFN-gamma antibody 1119 heavy chain SEQ ID NO:17.  
 KW antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;  
 KW anti-inflammatory; antiarthritic; anti-HIV; antianaemic;  
 KW antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;  
 KW gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;  
 KW multiple sclerosis; Addison's disease; type I diabetes; psoriasis;  
 KW myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;  
 KW systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;  
 KW vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;  
 KW immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004034988-A2.  
 XX  
 PD 29-APR-2004.  
 XX  
 XX 14-OCT-2003; 2003WO-US032678.  
 XX  
 XX 16-OCT-2002; 2002US-0419057P.  
 PR  
 PR 17-JUN-2003; 2003US-0479241P.  
 XX  
 PA (AMGE-) AMGEN INC.  
 XX  
 XX Welcher A, Chute H, Li L, Huang H;  
 PI  
 XX WPI; 2004-348323/32.  
 DR  
 XX New antibody that binds specifically to IFN-gamma and comprising a heavy  
 PT chain CDR3, useful in preparing a composition for treating IFN-gamma  
 PT mediated diseases e.g., AIDS, psoriasis, myasthenia gravis, cirrhosis or  
 PT atherosclerosis.  
 XX  
 PS Claim 12; SEQ ID NO 17; 115pp; English.  
 XX  
 CC The present invention describes an isolated antibody which binds  
 CC specifically to interferon (IFN)-gamma and comprises a heavy chain  
 CC complementarity determining region (CDR) 3 having a sequence comprising  
 CC at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36  
 CC (ADS87943) in the same order and spacing, or an amino acid sequence of  
 CC SEQ ID NO:37 (ADS87944). Also described: (1) an isolated polynucleotide  
 CC encoding the antibody; (2) a method of treating an IFN-gamma mediated

CC disease; and (3) a composition comprising a carrier and the antibody. The  
 CC IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-  
 CC HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and  
 CC antidiabetic activities, and can be used in gene therapy. The antibody is  
 CC useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid  
 CC arthritis, inflammatory bowel disease, multiple sclerosis, Addison's  
 CC disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus  
 CC nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,  
 CC Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome  
 CC or haemolytic anaemia. The present sequence represents an immunoglobulin  
 CC G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the  
 CC exemplification of the present invention.  
 XX  
 SQ Sequence 447 AA;

Query Match 100.0%; Score 1263; DB 8; Length 447;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 216 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 275

QY 61 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 276 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 335

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
 DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232  
 DB 396 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 447

RESULT 121  
 ADS87926  
 ID ADS87926 standard; protein; 447 AA.  
 XX  
 AC ADS87926;  
 XX  
 DT 18-NOV-2004 (first entry)  
 XX  
 DE Anti-IFN-gamma antibody 1118 heavy chain SEQ ID NO:19.  
 XX  
 KW antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;  
 KW anti-inflammatory; antiarthritic; anti-HIV; antianaemic;  
 KW antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;  
 KW gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;  
 KW multiple sclerosis; Addison's disease; type I diabetes; psoriasis;  
 KW myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;  
 KW systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;  
 KW vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;  
 KW immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004034988-A2.  
 FN  
 PD 29-APR-2004.  
 XX  
 XX 14-OCT-2003; 2003WO-US032678.  
 XX  
 XX 16-OCT-2002; 2002US-0419057P.  
 PR  
 PR 17-JUN-2003; 2003US-0479241P.  
 XX  
 PA (AMGE-) AMGEN INC.  
 XX  
 XX Welcher A, Chute H, Li L, Huang H;  
 PI  
 XX WPI; 2004-348323/32.  
 DR  
 XX

PT New antibody that binds specifically to IFN-gamma and comprising a heavy  
PT chain CDR3, useful in preparing a composition for treating IFN-gamma  
PT mediated diseases e.g., AIDS, psoriasis, myasthenia gravis, cirrhosis or  
PT atherosclerosis.

PS Claim 12; SEQ ID NO 19; 115pp; English.

XX The present invention describes an isolated antibody which binds  
CC specifically to interferon (IFN)-gamma and comprises a heavy chain  
CC complementarity determining region (CDR) 3 having a sequence comprising  
CC at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36  
CC (ADS87943) in the same order and spacing, or an amino acid sequence of  
CC SEQ ID NO:37 (ADS87944). Also described: (1) an isolated polynucleotide  
CC encoding the antibody; (2) a method of treating an IFN-gamma mediated  
CC disease; and (3) a composition comprising a carrier and the antibody. The  
CC IFN-gamma binding antibody has anti-inflammatory, antiparasitic, anti-  
CC HIV, antianemic, antiarteriosclerotic, hepatotropic, antipsoriatic and  
CC antidiabetic activities, and can be used in gene therapy. The antibody is  
CC useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid  
CC arthritis, inflammatory bowel disease, multiple sclerosis, Addison's  
CC disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus  
CC nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,  
CC Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome  
CC or haemolytic anaemia. The present sequence represents an immunoglobulin  
CC G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the  
CC exemplification of the present invention.

XX Sequence 447 AA;

Query Match 100.0%; Score 1263; DB 8; Length 447;

Best Local Similarity 100.0%; Pred. No. 3.3e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB |||||

216 EPKSCDKTHTCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 275  
DB |||||

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB |||||

276 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335  
DB |||||

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180  
DB |||||

336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 395  
DB |||||

QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232  
DB |||||

396 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 447  
DB |||||

RESULT 122

ADS87939

ID ADS87939 standard; protein; 447 AA.

XX ADS87939;

AC ADS87939;

XX 18-NOV-2004 (first entry)

XX Anti-IFN-gamma antibody 1118\* heavy chain SEQ ID NO:32.

DE antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;

XX anti-inflammatory; antiarthritic; anti-HIV; antianemic;

KW antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;

KW gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;

KW multiple sclerosis; Addison's disease; type I diabetes; psoriasis;

KW myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;

KW systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;

KW vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;

KW immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.

XX Homo sapiens.

OS

XX WO2004034988-A2.

PN

XX 29-APR-2004.

PD 14-OCT-2003; 2003WO-US032678.

XX 16-OCT-2002; 2002US-0419057P.

XX 17-JUN-2003; 2003US-0479241P.

PR (AMGE-) AMGEN INC.

XX Welcher A, Chute H, Li L, Huang H;

XX WPI; 2004-348323/32.

XX New antibody that binds specifically to IFN-gamma and comprising a heavy

XX chain CDR3, useful in preparing a composition for treating IFN-gamma

XX mediated diseases e.g., AIDS, psoriasis, myasthenia gravis, cirrhosis or

XX atherosclerosis.

XX Claim 12; SEQ ID NO 32; 115pp; English.

XX The present invention describes an isolated antibody which binds

XX specifically to interferon (IFN)-gamma and comprises a heavy chain

XX complementarity determining region (CDR) 3 having a sequence comprising

XX at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36

XX (ADS87943) in the same order and spacing, or an amino acid sequence of

XX SEQ ID NO:37 (ADS87944). Also described: (1) an isolated polynucleotide

XX encoding the antibody; (2) a method of treating an IFN-gamma mediated

XX disease; and (3) a composition comprising a carrier and the antibody. The

XX IFN-gamma binding antibody has anti-inflammatory, antiparasitic, anti-

XX HIV, antianemic, antiarteriosclerotic, hepatotropic, antipsoriatic and

XX antidiabetic activities, and can be used in gene therapy. The antibody is

XX useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid

XX arthritis, inflammatory bowel disease, multiple sclerosis, Addison's

XX disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus

XX nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,

XX Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome

XX or haemolytic anaemia. The present sequence represents an immunoglobulin

XX G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the

XX exemplification of the present invention.

XX Sequence 447 AA;

QY Query Match 100.0%; Score 1263; DB 8; Length 447;

DB Best Local Similarity 100.0%; Pred. No. 3.3e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

DB 216 EPKSCDKTHTCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 275

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

DB 276 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180

DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 395

QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232

DB 396 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 447

RESULT 123

ADS94936

ID ADS94936 standard; protein; 447 AA.

XX ADS94936;

XX ADS94936;

XX 02-DEC-2004 (first entry)

XX Anti-IFN-gamma antibody 1118\* heavy chain SEQ ID NO:32.

DE antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;

XX anti-inflammatory; antiarthritic; anti-HIV; antianemic;

KW antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;

KW gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;

KW multiple sclerosis; Addison's disease; type I diabetes; psoriasis;

KW myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;

KW systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;

KW vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;

KW immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.

XX Homo sapiens.

OS

XX WO2004034988-A2.

PN

XX antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;  
 KW anti-inflammatory; antiarthritic; anti-HIV; antianemic;  
 KW antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;  
 KW gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;  
 KW multiple sclerosis; Addison's disease; type I diabetes; psoriasis;  
 KW myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;  
 KW systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;  
 KW vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;  
 KW immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004035747-A2.  
 XX  
 XX 29-APR-2004.  
 XX  
 XX 16-OCT-2003; 2003WO-US032871.  
 XX  
 XX 16-OCT-2002; 2002US-0419057P.  
 XX  
 XX 17-JUN-2003; 2003US-0479241P.  
 XX  
 XX (AMGE-) AMGEN INC.  
 XX (MEDA-) MEDAREX INC.  
 XX  
 XX Welcher AA, Chute HT, Li Y, Huang H;  
 XX  
 XX WPI; 2004-348443/32.  
 XX  
 XX New human anti-interferon-gamma neutralizing antibodies for treating  
 PT interferon-gamma-mediated diseases, such as AIDS, rheumatoid arthritis,  
 PT diabetes, Grave's disease, psoriasis, atherosclerosis or transplant  
 PT rejection.  
 XX  
 XX Claim 14; SEQ ID NO 32; 115pp; English.  
 XX  
 XX The present invention describes an isolated antibody which binds  
 CC specifically to interferon (IFN)-gamma and comprises a heavy chain  
 CC complementarity determining region (CDR) 3 having a sequence comprising  
 CC at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36  
 CC (ADS94940) in the same order and spacing, or an amino acid sequence of  
 CC SEQ ID NO:37 (ADS94941). Also described: (1) an isolated polynucleotide  
 CC encoding the antibody; (2) a method of treating an IFN-gamma mediated  
 CC disease; and (3) a composition comprising a carrier and the antibody. The  
 CC IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-  
 CC HIV, antianemic, antiarteriosclerotic, hepatotropic, antipsoriatic and  
 CC useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid  
 CC arthritis, inflammatory bowel disease, multiple sclerosis, Addison's  
 CC disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus  
 CC nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,  
 CC Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome  
 CC or haemolytic anaemia. The present sequence represents an immunoglobulin  
 CC G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the  
 CC exemplification of the present invention.  
 XX  
 XX Sequence 447 AA;  
 XX  
 XX Query Match 100.0%; Score 1263; DB 8; Length 447;  
 XX Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 QY 1 EPKSCDKTHCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDDEVKF 60  
 DB |||||||  
 DB 216 EPKSCDKTHCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDDEVKF 275  
 QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB |||||||  
 DB 276 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEGSGQPENNYKTP 180  
 DB |||||||  
 DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEGSGQPENNYKTP 395

QY 181 PVLDSGSGFFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKLSLSLSPGK 232  
 DB |||||||  
 DB 336 PVLDSGSGFFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTKLSLSLSPGK 447  
 XX  
 XX RESULT 124  
 XX ADS94923  
 XX ID ADS94923 standard; protein; 447 AA.  
 XX AC ADS94923;  
 XX XX  
 XX DT 02-DEC-2004 (first entry)  
 XX  
 XX DE Anti-IFN-gamma antibody 1118 heavy chain SEQ ID NO:19.  
 XX  
 XX KW antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;  
 KW anti-inflammatory; antiarthritic; anti-HIV; antianemic;  
 KW antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;  
 KW gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;  
 KW multiple sclerosis; Addison's disease; type I diabetes; psoriasis;  
 KW myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;  
 KW systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;  
 KW vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;  
 KW immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.  
 XX  
 XX OS Homo sapiens.  
 XX  
 XX PN WO2004035747-A2.  
 XX  
 XX PD 29-APR-2004.  
 XX  
 XX PF 16-OCT-2003; 2003WO-US032871.  
 XX  
 XX PR 16-OCT-2002; 2002US-0419057P.  
 XX  
 XX PR 17-JUN-2003; 2003US-0479241P.  
 XX  
 XX (AMGE-) AMGEN INC.  
 XX (MEDA-) MEDAREX INC.  
 XX  
 XX Welcher AA, Chute HT, Li Y, Huang H;  
 XX  
 XX WPI; 2004-348443/32.  
 XX  
 XX New human anti-interferon-gamma neutralizing antibodies for treating  
 PT interferon-gamma-mediated diseases, such as AIDS, rheumatoid arthritis,  
 PT diabetes, Grave's disease, psoriasis, atherosclerosis or transplant  
 PT rejection.  
 XX  
 XX Claim 14; SEQ ID NO 19; 115pp; English.  
 XX  
 XX The present invention describes an isolated antibody which binds  
 CC specifically to interferon (IFN)-gamma and comprises a heavy chain  
 CC complementarity determining region (CDR) 3 having a sequence comprising  
 CC at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36  
 CC (ADS94940) in the same order and spacing, or an amino acid sequence of  
 CC SEQ ID NO:37 (ADS94941). Also described: (1) an isolated polynucleotide  
 CC encoding the antibody; (2) a method of treating an IFN-gamma mediated  
 CC disease; and (3) a composition comprising a carrier and the antibody. The  
 CC IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-  
 CC HIV, antianemic, antiarteriosclerotic, hepatotropic, antipsoriatic and  
 CC useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid  
 CC arthritis, inflammatory bowel disease, multiple sclerosis, Addison's  
 CC disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus  
 CC nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,  
 CC Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome  
 CC or haemolytic anaemia. The present sequence represents an immunoglobulin  
 CC G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the  
 CC exemplification of the present invention.  
 XX  
 XX Sequence 447 AA;

```
Query Match 100.0%; Score 1263; DB 8; Length 447;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 216 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275
QY 61 NMYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 276 NMYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 395

RESULT 125
ADS94921
ID ADS94921 standard; protein; 447 AA.
XX AC ADS94921;
XX DT 02-DEC-2004 (first entry)
XX DE Anti-IFN-gamma antibody 1119 heavy chain SEQ ID NO:17.
XX KW antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
XX KW anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
XX KW antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
XX KW gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
XX KW multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
XX KW myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
XX KW systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
XX KW vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
XX KW immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX OS Homo sapiens.
XX PN WO2004035747-A2.
XX PD 29-APR-2004.
XX PF 16-OCT-2003; 2003WO-US032871.
XX PR 16-OCT-2003; 2002US-0419057P.
XX PR 17-JUN-2003; 2003US-0479241P.
XX PA (AMGE-) AMGEN INC.
XX PA (MEDA-) MEDAREX INC.
XX PI Welcher AA, Chute HT, Li Y, Huang H;
XX PS WPI; 2004-348443/32.
XX PT New human anti-interferon-gamma neutralizing antibodies for treating
XX PT interferon-gamma-mediated diseases, such as AIDS, rheumatoid arthritis,
XX PT diabetes, Grave's disease, psoriasis, atherosclerosis or transplant
XX PT rejection.
XX PS Claim 14; SEQ ID NO 17; 115pp; English.
XX CC The present invention describes an isolated antibody which binds
XX CC specifically to interferon (IFN)-gamma and comprises a heavy chain
XX CC complementarity determining region (CDR) 3 having a sequence comprising
XX CC at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36
XX CC (ADS94940) in the same order and spacing, or an amino acid sequence of
XX CC SEQ ID NO:37 (ADS94941). Also described: (1) an isolated polynucleotide
XX CC encoding the antibody; (2) a method of treating an IFN-gamma mediated
```

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CC disease; and (3) a composition comprising a carrier and the antibody. The
CC IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-
CC HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and
CC antidiabetic activities, and can be used in gene therapy. The antibody is
CC useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid
CC arthritis, inflammatory bowel disease, multiple sclerosis, Addison's
CC disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus
CC nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,
CC Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome
CC or haemolytic anaemia. The present sequence represents an immunoglobulin
CC G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the
CC exemplification of the present invention.
XX SQ Sequence 447 AA;
XX Query Match 100.0%; Score 1263; DB 8; Length 447;
XX Best Local Similarity 100.0%; Pred. No. 3.3e-91;
XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 216 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275
QY 61 NMYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 276 NMYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 395
QY 181 PVLDSGGSFELYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSPGK 232
DB 396 PVLDSGGSFELYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSPGK 447
RESULT 126
ADS94925
ID ADS94925 standard; protein; 447 AA.
XX AC ADS94925;
XX DT 02-DEC-2004 (first entry)
XX DE Anti-IFN-gamma antibody 1121 or 1121* heavy chain SEQ ID NO:21.
XX KW antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
XX KW anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
XX KW antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
XX KW gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
XX KW multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
XX KW myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
XX KW systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
XX KW vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
XX KW immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX OS Homo sapiens.
XX PN WO2004035747-A2.
XX PD 29-APR-2004.
XX PF 16-OCT-2003; 2003WO-US032871.
XX PR 16-OCT-2002; 2002US-0419057P.
XX PR 17-JUN-2003; 2003US-0479241P.
XX PA (AMGE-) AMGEN INC.
XX PA (MEDA-) MEDAREX INC.
XX PI Welcher AA, Chute HT, Li Y, Huang H;
XX PS WPI; 2004-348443/32.
```

XX New human anti-interferon-gamma neutralizing antibodies for treating  
 PT interferon-gamma-mediated diseases, such as AIDS, rheumatoid arthritis,  
 PT diabetes, Grave's disease, psoriasis, atherosclerosis or transplant  
 PT rejection.  
 XX Claim 14; SEQ ID NO 21; 115pp; English.  
 XX  
 XX The present invention describes an isolated antibody which binds  
 CC specifically to interferon (IFN)-gamma and comprises a heavy chain  
 CC complementarity determining region (CDR) 3 having a sequence comprising  
 CC at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36  
 CC (AD994940) in the same order and spacing, or an amino acid sequence of  
 CC SEQ ID NO:37 (AD994941). Also described: (1) an isolated polynucleotide  
 CC encoding the antibody; (2) a method of treating an IFN-gamma mediated  
 CC disease; and (3) a composition comprising a carrier and the antibody. The  
 CC IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-  
 CC HIV, antianemic, antiarteriosclerotic, hepatotropic, antipsoriatic and  
 CC antidiabetic activities, and can be used in gene therapy. The antibody is  
 CC useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid  
 CC arthritis, inflammatory bowel disease, multiple sclerosis, Addison's  
 CC disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus  
 CC nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,  
 CC Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome  
 CC or haemolytic anaemia. The present sequence represents an immunoglobulin  
 CC G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the  
 CC exemplification of the present invention.  
 XX  
 XX Sequence 447 AA;  
 SQ

Query Match 100.0%; Score 1263; DB 8; Length 447;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 216 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 275  
 QY 61 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 276 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335  
 QY 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 336 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 395  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 396 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 447

RESULT 127  
 AAB28694  
 ID AAB28694 standard; protein; 448 AA.  
 XX  
 XX AAB28694;  
 XX  
 XX 14-FEB-2001 (first entry)  
 XX  
 XX Fc-muAGP-1 (99-291) fusion protein.  
 XX  
 XX Mouse; AGP-1; type II transmembrane protein; cytostatic; antiviral;  
 KW antiinflammatory; hepatotropic; antiarteriosclerotic; anti-HIV; HIV;  
 KW human immunodeficiency virus; apoptosis; proliferative disorder; cancer;  
 KW hepatitis; acquired immunodeficiency syndrome; AIDS; autoimmune disorder;  
 KW transplant rejection; cardiovascular disease; arteriosclerosis;  
 KW Fc-muAGP-1; fusion protein.  
 XX  
 XX Mus sp.  
 OS  
 XX WO200063253-A1.  
 PN  
 XX 26-OCT-2000.  
 PD

XX 24-MAR-2000; 2000WO-US008004.  
 XX  
 XX 16-APR-1999; 99US-00293245.  
 XX  
 XX (AMGE-) AMGEN INC.  
 XX  
 XX Hsu H, Meng S;  
 XX  
 XX WPI: 2000-665240/64.  
 XX N-PSDB; AAC67834.  
 XX  
 XX Fusion protein of AGP-1 protein and an Fc region, used to treat  
 PT proliferative disorders, immune disorders, and virally-induced disorders.  
 PT  
 XX Disclosure; Fig 5; 93pp; English.  
 PS  
 XX The present sequence is an AGP-1 fusion protein. AGP-1 is a type II  
 CC transmembrane protein. The fusion proteins comprise an Fc immunoglobulin  
 CC region fused to the N-terminal portion of the AGP-1 protein. The fusion  
 CC proteins can be used to induce apoptosis in a tissue, and to treat  
 CC proliferative disorders, immune disorders, or virally-induced disorders.  
 CC The proliferative disorders include cancers, such as breast, prostate,  
 CC lung or colon cancer. The viral infections include hepatitis, and  
 CC acquired immunodeficiency syndrome (AIDS), and the immune disorders may  
 CC be autoimmune disorders or transplant rejection. Cardiovascular diseases  
 CC such as arteriosclerosis may also be treated. The AGP-1 containing fusion  
 CC proteins have increased biological activity compared to the soluble AGP-1  
 CC proteins used in prior art therapies  
 XX  
 XX Sequence 448 AA;  
 SQ

Query Match 100.0%; Score 1263; DB 3; Length 448;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 24 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 83  
 QY 61 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 84 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 143  
 QY 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 144 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 203  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 204 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 255

RESULT 128  
 AAM49203  
 ID AAM49203 standard; protein; 448 AA.  
 XX  
 XX AAM49203;  
 XX  
 XX 29-AUG-2003 (revised)  
 XX  
 XX 28-JUN-2002 (first entry)  
 XX  
 XX Humanised monoclonal antibody 5c8 (hu5c8) heavy chain.  
 XX  
 XX Monoclonal antibody; mAb; humanised; murine; mouse; 5c8; hu5c8;  
 KW heavy chain; anti-CD145; CD145-antibody complex; 3D structure;  
 KW three dimensional structure; drug design; drug discovery;  
 KW activated T cell; CD40 interaction; T cell dependent immune response;  
 KW agonist; antagonist; immune response; inflammatory response;  
 KW autoimmune disease; allergy; inhibitor response; organ graft rejection;  
 KW B cell cancer; Alzheimer's disease; multiple sclerosis; antiinflammatory;  
 KW immunosuppressive; antiallergic; cytostatic; dermatological;  
 KW antiasthmatic; nootropic; neuroprotective; antiarteriosclerotic;

KW antiviral; antidiabetic; cardiant; antiischaemic; vasodilator;  
 KW antirheumatic; antiarthritic; antipsoriatic; immunomodulator; antibody;  
 KW complementarity determining region; CDR; protein co-ordinate data.

OS Mus sp.  
 OS Homo sapiens.  
 OS Chimeric.

XX Key Location/Qualifiers

FT Region 1. .219 /note= "Forms part of the crystal of the invention"

FT Region 31. .35 /label= CDR1

FT Binding-site 31. .33 /note= "Complementarity determining region 1"

FT Region 50. .56 /note= "Binds to CD145 (AAM49202)"

FT Binding-site 52 /label= CDR2

FT Binding-site 54 /note= "Complementarity determining region 2"

FT Binding-site 54 /note= "Binds to CD145 (AAM49202)"

FT Binding-site 57 /note= "Binds to CD145 (AAM49202)"

FT Binding-site 59 /note= "Binds to CD145 (AAM49202)"

FT Binding-site 99. .106 /note= "Binds to CD145 (AAM49202)"

FT Region /label= CDR3

FT Binding-site 102. .103 /note= "Complementarity determining region 3"

FT Binding-site /note= "Binds to CD145 (AAM49202)"

XX WO200218445-A2.

XX 07-MAR-2002.

XX 31-AUG-2001; 2001WO-US027352.

XX 01-SEP-2000; 2000US-0229933P.

XX 16-MAR-2001; 2001US-0276452P.

XX (BIOJ ) BIOGEN INC.

XX Karpusas M, Hsu Y, Taylor FR, Zheng Z;

XX WPI; 2002-329760/36.

XX Crystal comprising a CD154 polypeptide complexed with an anti-CD154  
 PT antibody, or its antigen binding fragment, useful for designing drugs for  
 PT the treatment of an autoimmune disease, an allergy, multiple sclerosis  
 PT and Alzheimer's disease.

XX Example 1; Fig 8; 470pp; English.

XX The invention relates to a crystal comprising a CD145 polypeptide in  
 CC complex with an anti-CD45 antibody or its antigen-binding fragment, and  
 CC the structure coordinates of such a crystal. In particular, the crystal  
 CC comprises human CD145 (AAM49202) and a humanised version of the murine  
 CC monoclonal antibody 5c8 (hu5c8; AAM49203, AAM49204). CD145, also known as  
 CC CD40L, gp39, T-BAM, 5c8 antigen, CD40CR and TRAP) is a 32 kD type II  
 CC membrane glycoprotein which is transiently expressed on activated T  
 CC cells. It interacts with CD40 which is expressed on mature B cells,  
 CC macrophages, dendritic cells, fibroblasts and activated endothelial  
 CC cells. This CD40:CD145 interaction is required for T cell-dependent  
 CC antibody responses, type I T-helper cell responses, and nitric oxide (NO)  
 CC production by macrophages. NO mediates many of the pro-inflammatory  
 CC activities of macrophages, and disruption of the CD40:CD145 interaction  
 CC via the use of an anti-CD145 antibody has been shown to reduce the  
 CC symptoms of autoimmune and inflammatory conditions. The crystal structure  
 CC of the invention can be used to determine the three dimensional structure  
 CC of the CD145:anti-CD145 antibody complex, and thereby provide information  
 CC about this interaction which may be of use in designing non-antibody

CC CD145 agonists and antagonists which modulate the CD40:CD145 interaction.  
 CC Such compounds may be used in the treatment of an unwanted immune  
 CC response, an unwanted inflammatory response, an autoimmune disease, an  
 CC allergy, an inhibitor response to a therapeutic agent, rejection of a  
 CC donor organ, or a B cell cancer. They may be specifically be used to  
 CC treat systemic lupus erythematosus, lupus nephritis, lupus neuritis,  
 CC asthma, chronic obstructive pulmonary disease (COPD), bronchitis,  
 CC emphysema, multiple sclerosis, uveitis, Alzheimer's disease, traumatic  
 CC spinal cord injury, stroke, atherosclerosis, coronary restenosis,  
 CC ischaemic congestive heart failure, cirrhosis, hepatitis C, diabetic  
 CC neuropathy, glomerulonephritis, osteoarthritis, rheumatoid arthritis,  
 CC psoriasis, atopic dermatitis, systemic sclerosis, radiation-induced  
 CC fibrosis, Crohn's disease, ulcerative colitis, multiple myeloma and  
 CC cachexia. Sequences AAM49203 and AAM49204 represent, respectively, the  
 CC heavy and light chains of the humanised version of the murine monoclonal  
 CC antibody 5c8 (hu5c8). (Updated on 29-AUG-2003 to standardise OS field)  
 XX  
 SQ Sequence 448 AA;

Query Match 100.0%; Score 1263; DB 5; Length 448;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 217 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 276  
 QY 61 NMVVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 120  
 DB 277 NMVVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 336  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180  
 DB 337 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 396  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232  
 DB 397 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 448

RESULT 129

ADF71908

ID ADF71908 standard; protein; 448 AA.

XX ADF71908;

DT 26-FEB-2004 (first entry)

XX Hu3G8VH-1G1 amino acid sequence SEQ ID NO:107.

XX anti-CD16A antibody; mouse; 3G8 antibody; humanised anti-CD16A antibody;  
 KW immune response; haemostatic; antirheumatic; antiarthritic;  
 KW dermatological; immunosuppressive; antiinflammatory; antinaeamic;  
 KW vasotropic; nephrotropic; neuroprotective; antipsoriatic; uropathic;  
 KW ophthalmological; antiasthmatic; inflammatory response;  
 KW autoimmune disease; idiopathic thrombocytopenic purpura;  
 KW rheumatoid arthritis; systemic lupus erythematosus;  
 KW autoimmune haemolytic anaemia; scleroderma;  
 KW autoantibody triggered urticaria; pemphigus; vasculitis syndrome;  
 KW systemic vasculitis; Goodpasture's syndrome; multiple sclerosis;  
 KW psoriatic arthritis; ankylosing spondylitis; Sjogren's syndrome;  
 KW Reiter's syndrome; Kawasaki's disease; polymyositis; dermatomyositis;  
 KW allergic asthma.

XX Synthetic.

OS Mus sp.

OS Homo sapiens.

XX WO2003101485-A1.

PN 11-DEC-2003.

PD 29-MAY-2003; 2003WO-US017111.

XX

PF

XX 30-MAY-2002; 2002US-0384689P.  
 PR 10-JAN-2003; 2003US-0439320P.  
 XX (MACR-) MACROGENICS INC.  
 XX Johnson LS, Huang L, Li H, Tuailon N;  
 XX WPI; 2004-042985/04.  
 XX Novel anti-CD16A antibody comprising complementarity determining regions  
 PT derived from mouse 3G8 antibody and humanized anti-CD16A antibody that  
 PT lacks effector function, useful for treating deleterious immune response.  
 XX  
 XX Disclosure; SEQ ID NO 107; 103pp; English.  
 XX  
 XX The present invention describes an anti-CD16A antibody (I) comprising a  
 CC VH domain comprising complementarity determining regions (CDRs) derived  
 CC from the mouse 3G8 antibody heavy chain and a VL domain comprising CDRs  
 CC derived from the mouse 3G8 antibody light chain or a humanised anti-CD16A  
 CC antibody (II) that lacks effector function and comprises all six CDRs of  
 CC mouse antibody 3G8. Also described is a method (M1) for reducing a  
 CC deleterious immune response in a mammal in need of such reduction, which  
 CC involves administering to the mammal a CD16A binding protein comprising  
 CC an Fc region derived from a human IgG heavy chain, where the Fc region  
 CC lacks effector function or is modified to reduce binding to an Fc  
 CC effector ligand. (I) and (II) have haemostatic, antirheumatic,  
 CC antiarthritic, dermatological, immunosuppressive, antiinflammatory,  
 CC antianemic, vasotropic, nephrotropic, neuroprotective, antipsoriatic,  
 CC uropathic, ophthalmological and antiasthmatic activities. (I) or (II) is  
 CC useful for reducing a deleterious immune response in a mammal which  
 CC involves administering to the mammal (I) or (II). The deleterious immune  
 CC response is an inflammatory response caused by autoimmune disease such as  
 CC idiopathic thrombocytopenic purpura (ITP), rheumatoid arthritis (RA),  
 CC systemic lupus erythematosus (SLE), autoimmune haemolytic anaemia (AHA),  
 CC scleroderma, autoantibody triggered arthritis, pemphigus, vasculitis  
 CC syndrome, systemic vasculitis, Goodpasture's syndrome, multiple sclerosis  
 CC (MS), psoriatic arthritis, ankylosing spondylitis, Sjogren's syndrome,  
 CC Reiter's syndrome, Kawasaki's disease, polymyositis and dermatomyositis  
 CC and also for treating diseases susceptible to treatment with intravenous  
 CC immunoglobulin (IVIg) therapy e.g., allergic asthma. The present sequence  
 CC is used in the exemplification of the present invention.  
 XX  
 XX Sequence 448 AA;  
 SQ  
 Query Match 100.0%; Score 1263; DB 8; Length 448;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 217 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 276  
 QY 61 NNYVDGVEVHNATKPREQYNSTYRVSVLTIVLHODWLNKGEYKCKVSNKALPAPIEKT 120  
 DB 277 NNYVDGVEVHNATKPREQYNSTYRVSVLTIVLHODWLNKGEYKCKVSNKALPAPIEKT 336  
 QY 121 ISKAKQPREPQYTLTPPERDELTKQVSLTCLVKGFPYSDIAVEVESNGQPNKYKTP 180  
 DB 337 ISKAKQPREPQYTLTPPERDELTKQVSLTCLVKGFPYSDIAVEVESNGQPNKYKTP 396  
 QY 181 PVLDSGSPFLYSKLVDSKRWQGNVFCSCVWHEALHNHYTKLSLSFGK 232  
 DB 397 PVLDSGSPFLYSKLVDSKRWQGNVFCSCVWHEALHNHYTKLSLSFGK 448  
 RESULT 130  
 ADP84969  
 ID ADP84969 standard; protein; 448 AA.  
 XX  
 AC ADP84969;  
 XX  
 XX 09-SEP-2004 (first entry)

XX Chimeric antibody cIgG-Karo4.  
 DE antibody; Core-1 antigen: framework region; immunoglobulin superfamily;  
 XX protease inhibitor; lectin; helix-bundle protein; lipocalin; diagnosis;  
 KW variable heavy chain; VH; variable light chain; VL; vaccine; diagnosis;  
 KW alleviation; treatment; tumour; breast; colon; stomach; pancreas;  
 KW large/small intestine; ovary; cervix; lung; prostate; kidney; liver;  
 XX metastasis.  
 XX Mus musculus.  
 OS WO2004050707-A2.  
 XX 17-JUN-2004.  
 PD  
 XX 01-DEC-2003; 2003WO-DE003994.  
 PF 29-NOV-2002; 2002DE-01056900.  
 PR (NEMO-) NEMOD BIOTHERAPEUTICS GMBH & CO KG.  
 XX Goletz S, Danielczyk A, Karsten U, Ravn P, Stahn R;  
 PI Christensen PA;  
 XX WPI; 2004-461095/43.  
 DR New recognition molecules, e.g. antibodies (and nucleic acids) that bind  
 PT specifically to Core-1 antigens, useful for diagnosis, treatment and  
 PT prevention of tumors and metastases.  
 PS Claim 26; SEQ ID NO 111; 136pp; German.  
 XX This invention describes novel recognition molecules, especially  
 CC antibodies that bind specifically to the Core-1 antigen. The recognition  
 CC molecules are used to make constructs containing the framework regions  
 CC that separate, include and/or flank the specified sequences, especially  
 CC where the framework regions are from the immunoglobulin (Ig) superfamily,  
 CC protease inhibitors, lectins, helix-bundle proteins and/or lipocalins.  
 CC Most especially the framework regions are from antibodies, particularly  
 CC the variable heavy chain (VH) and the variable light chain (VL) of human  
 CC and/or murine origin. The constructs may also include a His or myc tag, a  
 CC lysine-rich region and/or a multimerisation domain, most particularly it  
 CC is a single-chain antibody fragment, multibody, Fab fragment, fusion  
 CC protein of an antibody fragment with peptide or protein, and/or an Ig of  
 CC types G, M, A, E or D and/or their subclasses. It may be human,  
 CC humanised, murine or chimeric, e.g. IgM without the J chain. The  
 CC additional sequences/structures in the constructs are Ig domains of  
 CC various species, interacting or stabilising domains, signal sequences,  
 CC fluorescent dyes, toxins, antibodies with catalytic activity or other  
 CC effectors, MHC molecules, antigens, chelators for radioactive labels,  
 CC liposomes, transmembrane domains, viruses and/or cells, specifically  
 CC macrophages. The antibodies, also constructs containing them, nucleic  
 CC acid encoding them, and related vectors and host cells, are useful for  
 CC prevention (e.g. as vaccine), diagnosis, alleviation, treatment,  
 CC monitoring and/or secondary treatment of tumours (specifically of breast,  
 CC colon, stomach, pancreas, large/small intestine, ovary, cervix, lung,  
 CC prostate, kidney and/or liver) and/or metastases (particularly to liver),  
 CC specifically where these are positive for the C1 antigen. The products of  
 CC the invention provide simple, reliable and efficient detection of  
 CC tumours. They are specific for carcinoma and show almost no binding to  
 CC healthy tissue.  
 XX Sequence 448 AA;  
 SQ  
 Query Match 100.0%; Score 1263; DB 8; Length 448;  
 Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 217 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 276



Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 218 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 277  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 278 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 337  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 338 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 397  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232  
DB 398 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 449

RESULT 133  
ABP58273  
ID ABP58273 standard; protein; 449 AA.  
XX  
AC ABP58273;  
XX  
DT 23-OCT-2003 (revised)  
DT 31-MAR-2003 (first entry)  
XX  
XX Humanised 3D6 antibody heavy chain.  
XX  
XX Monoclonal antibody; 3D6; complementarity determining region; CDR; mouse;  
KW human; humanised antibody; antibody; Alzheimer's disease;  
KW Down's syndrome; cerebral amyloid angiopathy; neuroprotective; nontropic.  
XX  
OS Mus sp.  
OS Homo sapiens.  
OS Chimeric.

Key Location/Qualifiers  
FT Region 1. .119  
FT Region /note= "heavy chain variable region"  
FT Region 31. .35  
FT Region /note= "CDR1"  
FT Region 50. .66  
FT Region /note= "CDR2"  
FT Region 99. .108  
FT Region /note= "CDR3"  
XX  
XX WO200288306-A2.  
XX  
XX 07-NOV-2002.  
XX  
XX 26-APR-2002; 2002WO-US011853.  
XX  
XX 30-APR-2001; 2001US-0287539P.  
XX  
XX (ELIL ) LILLY & CO ELI.  
XX  
XX Tsurushita N, Vasquez M;  
XX  
XX WPI; 2003-183835/18.  
XX  
XX New humanized forms of mouse 3D6 antibodies, useful for treating Down's  
PT syndrome, (pre-)clinical Alzheimer's disease or (pre-)clinical cerebral  
PT amyloid angiopathy, or for inhibiting formation of or reducing Abeta  
PT plaque in the brain.  
XX  
XX Claim 5; Page 10-11; 54pp; English.  
XX  
XX The present sequence is that of a preferred heavy chain of a humanised  
CC antibody of the present invention. In the variable region of this  
CC sequence, the complementarity determining regions (CDRs) originate from  
CC murine monoclonal antibody 3D6 and the framework region originates from

CC human germline VH segment DP-45 and J segment JH4. Novel humanised  
CC antibodies of the invention have CDRs from 3D6 and human framework  
CC sequences. These humanised antibodies have binding affinities (affinity  
CC and epitope location) approximately the same as those of the mouse 3D6  
CC antibody. The invention includes antibodies, single chain antibodies, and  
CC their fragments, as well as nucleotide sequences, vectors, transformed  
CC host cells, and methods of using the humanised antibody to treat,  
CC prevent, alleviate, reverse or otherwise ameliorate symptoms and/or  
CC pathology associated with Down's syndrome, (pre-)clinical Alzheimer's  
CC disease or (pre-)clinical cerebral amyloid angiopathy, and to inhibit  
CC formation or reduce Abeta plaque in the brain. (Updated on 23-OCT-2003 to  
CC standardise OS field)  
XX  
SQ Sequence 449 AA;

Query Match 100.0%; Score 1263; DB 6; Length 449;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 218 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 277  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 278 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 337  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 338 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 397  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232  
DB 398 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 449

RESULT 134  
ADI35159  
ID ADI35159 standard; protein; 449 AA.  
XX  
AC ADI35159;  
XX  
DT 22-APR-2004 (first entry)  
XX  
DE Humanised C242 antibody variable heavy chain sequence.  
XX  
KW C242; monoclonal antibody; cytostatic; vaccine; human; C242-DM1; tumour.  
XX  
XX Homo sapiens.  
XX  
XX WO2004004639-A2.  
XX  
XX 15-JAN-2004.  
XX  
XX 02-JUL-2003; 2003WO-US020751.  
XX  
XX 02-JUL-2002; 2002US-0393189P.  
XX  
XX (SMIK ) SMITHKLINE BEECHAM CORP.  
XX  
XX Nesta DP;  
XX  
XX WPI; 2004-108709/11.  
XX  
XX New stable frozen or aqueous formulation for human monoclonal antibody  
PT huC242-DM1, useful as a treatment for antigen-expressing tumor types.  
XX  
XX Disclosure; SEQ ID NO 1; 11pp; English.  
XX  
XX The invention relates to a stable frozen formulation for monoclonal  
CC antibody C242 comprising C242 in a concentration range of about 1-30  
CC mg/mL in a buffer maintained at pH 5.8-6.5, and sucrose of about 5% w/v.  
CC The human C242-DM1 (immunoconjugate) antibody or formulations comprising

CC the antibody may be used as a treatment for antigen-expressing tumour  
CC types. The present sequence represents a humanised C242 antibody variable  
CC heavy chain sequence.

XX Sequence 449 AA;

Query Match 100.0%; Score 1263; DB 8; Length 449;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 218 EPKSCDKHTCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 277

QY 61 NMYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 120  
DB 278 NMYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 337

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTP 180  
DB 338 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTP 397

QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 232

DB 398 PVLDSGSPFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 449

RESULT 135

ABG74713  
ID ABG74713 standard; protein; 450 AA.

XX AC ABG74713;

XX 10-MAY-2003 (first entry)

XX Murine humanised Mu007 heavy chain variable region #2.

XX Murine; heavy chain; variable region; antibody; Crohn's disease;  
KW human interleukin (IL)-1beta; anti-rheumatic; antiarthritic; humanised;  
KW anti-inflammatory; osteopathic; antiallergic; cerebroprotective;  
KW antiasthmatic; immunosuppressive; antibacterial; vaccine; Mu007;  
KW rheumatoid arthritis; osteoarthritis; cartilage destruction; allergy;  
KW septic shock; endotoxemic shock; septicemia; stroke; asthma;  
KW graft versus host disease; inflammatory bowel disease.

XX Mus musculus.

XX Synthetic.

XX WO2003010282-A2.

XX 06-FEB-2003.

XX 18-JUL-2002; 2002WO-US021281.

XX 26-JUL-2001; 2001US-0307973P.

PR 14-AUG-2001; 2001US-0312278P.

XX (ELIL ) LILLY & CO ELI.

XX Bright SW, Jia AY, Kuhstoss SA, Manetta JV, Tsurushita N;

PI Vasquez MJ;

XX WPI; 2003-248068/24.

DR N-PSDB; ABQ77446.

XX New IL-1beta antibodies, useful for treating allergy, septic or endotoxemic  
PT shock, septicemia, stroke, asthma, graft versus host disease, Crohn's  
PT disease, or inflammatory bowel disease.

XX Disclosure; Page 84-86; 98pp; English.

XX This invention describes a novel antibody that specifically binds mature  
CC human interleukin (IL)-1beta, and binds the same epitope on mature human

CC IL-1beta as mouse monoclonal antibody Mu007 or humanized antibody Hu007.  
CC The antibody of the invention have anti-rheumatic, antiarthritic,  
CC anti-inflammatory, osteopathic, antiallergic, cerebroprotective,  
CC antiasthmatic, immunosuppressive and antibacterial activity and can be  
CC used in a vaccine. The antibody is useful for manufacturing a medicament  
CC for treating rheumatoid arthritis or osteoarthritis, or for inhibiting  
CC cartilage destruction in a subject. The antibody is also useful for  
CC treating allergy, septic or endotoxemic shock, septicemia, stroke, asthma,  
CC graft versus host disease, Crohn's disease, or inflammatory bowel  
CC disease. This sequence represents the humanised murine Mu007 heavy chain  
CC variable region described in the disclosure of the invention  
XX Sequence 450 AA;

Query Match 100.0%; Score 1263; DB 6; Length 450;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 219 EPKSCDKHTCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 278

QY 61 NMYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 120  
DB 279 NMYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 338

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTP 180  
DB 339 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTP 398

QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 232  
DB 399 PVLDSGSPFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 450

RESULT 136

ABR83153  
ID ABR83153 standard; protein; 450 AA.

XX AC ABR83153;

XX 15-JAN-2004 (first entry)

XX Hu007 antibody analogue heavy chain sequence.

XX Hu007; analogue; humanized antibody; IL-1beta; interleukin-1 beta;  
KW complementarity determining region; osteopathic; antiarthritic;  
KW gene therapy; CDR.

XX Synthetic.

XX WO2003073982-A2.

XX 12-SEP-2003.

XX 20-FEB-2003; 2003WO-US003117.

XX 28-FEB-2002; 2002US-0361423P.

XX (ELIL ) LILLY & CO ELI.

XX Beals JW, Huang L, Lu J, Rogers DP, Witcher DR;

XX WPI; 2003-731644/59.

DR N-PSDB; ACF57838.

XX New analog of humanized antibody Hu007 that specifically binds mature IL-  
PT 1 beta, useful for the manufacture of a medicament for treating  
PT rheumatoid arthritis or osteoarthritis.

XX Claim 17; Page 15-18; 120pp; English.

XX The invention relates to an analogue of humanized antibody Hu007 that

CC specifically binds mature IL-1beta and comprises at least one amino acid  
CC substitution at positions 54, 55 or 56 of the heavy chain complementarity  
CC determining region 2 (CDR2). The analogue is useful for the manufacture  
CC of a medicament for treating rheumatoid arthritis or osteoarthritis or  
CC for inhibiting cartilage destruction. The present sequence represents an  
CC antibody Hu007 analogue heavy chain sequence  
XX  
SQ Sequence 450 AA;

Query Match 100.0%; Score 1263; DB 7; Length 450;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDITLMISRTPTVTCVVVDVSHEDPEVKF 60  
DB 219 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDITLMISRTPTVTCVVVDVSHEDPEVKF 278  
QY 61 NWYVDGVEVHNATKPREEQNSTYRVSVSLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
DB 279 NWYVDGVEVHNATKPREEQNSTYRVSVSLTVLHQDWLNGKEYCKVSNKALPAPIEKT 338  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 339 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 398  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSSVMHEALHNHYTOKSLSLSPGK 232  
DB 399 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSSVMHEALHNHYTOKSLSLSPGK 450

RESULT 137  
ADS18704  
ID ADS18704 standard; protein; 450 AA.  
XX  
AC ADS18704;  
XX  
DT 18-NOV-2004 (first entry)  
XX  
DE Protein sequence of human W17-IgG1 heavy chain.  
XX  
KW Antibody; humanised; complementarity determining region; CDR; CDR1; CDR2;  
KW CDR3; W17-IgG1 heavy chain; interleukin -1 beta; IL-1 beta; cytokine;  
KW bone destruction; cartilage destruction; rheumatoid arthritis;  
KW osteoarthritis; clinical efficacy; neuro-inflammation; stroke; ischaemic;  
KW excitotoxic; traumatic head injury; inflammatory disorder; IgG; human.  
OS Homo sapiens.

XX Key Location/Qualifiers  
FH Misc-difference 55  
FT /note= "This specification states that there is  
FT elimination of deamidation at this position, however,  
FT this residue is a Serine and not an Asparagine or  
FT Glutamine"  
XX  
PN WO2004067568-A2.  
XX  
PD 12-AUG-2004.  
XX  
PF 21-JAN-2004; 2004WO-US0000019.  
XX  
PR 24-JAN-2003; 2003US-0442798P.  
XX  
PA (MOLE-) APPLIED MOLECULAR EVOLUTION INC.  
XX  
PI Dickinson CD, Vasserot AP, Watkins JD, Lu J;  
XX  
DR WPI; 2004-580977/56.  
XX  
PT New isolated antibodies that specifically bind mature human IL-1 beta,  
PT useful for treating diseases such as rheumatoid arthritis, osteoarthritis  
PT or neuroinflammation, or for inhibiting cartilage destruction.  
XX

PS Claim 5; SEQ ID NO 47; 79pp; English.  
XX  
CC The present invention encompasses humanised IL-1 beta antibodies. These  
CC antibodies are high affinity antibodies with improved stability, reduced  
CC deamidation and highly specific for IL-1 beta compared to the native  
CC antibody. They have potent IL-1 beta neutralising activity. The increased  
CC potency of an existing antibody is achieved through selective changes to  
CC one or more amino acids. The property of the antibodies of the invention  
CC resides primarily in the variable regions or complementarity determining  
CC regions (CDR) of the antibody. The proposed antibodies are comprised of  
CC light chain (CDR1, CDR2 and CDR3) and heavy chain (CDR1, CDR2 and CDR3)  
CC antibody. Interleukin -1 beta is a pro-inflammatory cytokine which is the  
CC primary mediator of bone and cartilage destruction. The over-production  
CC of the IL-1 beta has been implicated in the pathogenesis of a variety of  
CC diseases (rheumatoid arthritis, osteoarthritis, asthma, neuro-  
CC inflammation, graft versus host disease, Crohn's disease, inflammatory  
CC bowel disease, multiple sclerosis, Parkinson's and Alzheimer's disease  
CC etc.). An effective amount of the IL-1 beta antibodies of the present  
CC invention provides clinical efficacy without intolerable side effects or  
CC toxicity. The antibodies are also useful for manufacturing a medicament  
CC for the treatment of rheumatoid arthritis and osteoarthritis. It can be  
CC used to inhibit cartilage destruction and neuro-inflammation (which is  
CC associated with stroke or ischaemic, excitotoxic, or traumatic head  
CC injury). The IL-1 beta antibodies of the invention are preferably used to  
CC treat rheumatoid arthritis (RA), osteoarthritis (OA) and neuro-  
CC inflammation. The IL-1 beta antibodies of the invention can be used alone  
CC or in combination DMARDS (disease modifying antirheumatic drugs) to  
CC reduce IL-1 beta protein levels in plasma. The invention provides the  
CC polynucleotide sequences which encode the antibodies against IL-1 beta.  
CC It also provides the methods for using these antibodies for the treatment  
CC of IL-1 beta related inflammatory disorders. The isolated antibodies of  
CC the invention are selected from the group IgG1 and IgG4. IgG antibodies  
CC are the most abundant immunoglobulin and has the longest half-life in  
CC serum compared to other immunoglobulin. Unlike other immunoglobulins IgG  
CC is efficiently recirculated. The presented protein sequence is the human  
CC W17-IgG1 heavy chain.  
XX  
SQ Sequence 450 AA;

Query Match 100.0%; Score 1263; DB 8; Length 450;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDITLMISRTPTVTCVVVDVSHEDPEVKF 60  
DB 219 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDITLMISRTPTVTCVVVDVSHEDPEVKF 278  
QY 61 NWYVDGVEVHNATKPREEQNSTYRVSVSLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
DB 279 NWYVDGVEVHNATKPREEQNSTYRVSVSLTVLHQDWLNGKEYCKVSNKALPAPIEKT 338  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 339 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 398  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSSVMHEALHNHYTOKSLSLSPGK 232  
DB 399 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSSVMHEALHNHYTOKSLSLSPGK 450

RESULT 138  
ADS18706  
ID ADS18706 standard; protein; 450 AA.  
XX  
AC ADS18706;  
XX  
DT 18-NOV-2004 (first entry)  
XX  
DE Protein sequence of human W18-heavy chain.  
XX  
KW Antibody; humanised; complementarity determining region; CDR; CDR1; CDR2;  
KW CDR3; W18-heavy chain; interleukin -1 beta; IL-1 beta; cytokine;  
KW bone destruction; cartilage destruction; rheumatoid arthritis;  
KW

KW osteoarthritis; clinical efficacy; neuro-inflammation; stroke; ischaemic;  
 KW excitotoxic; traumatic head injury; inflammatory disorder; IgG; human.  
 XX Homo sapiens.

Key Location/Qualifiers  
 FT Misc-difference 55 /note= "This specification states that there is  
 FT elimination of deamidation at this position, however,  
 FT this residue is a Serine and not an Asparagine or  
 FT Glutamine"

XX WO2004067568-A2.  
 XX 12-AUG-2004.  
 XX 21-JAN-2004; 2004WO-US000019.  
 XX 24-JAN-2003; 2003US-0442798P.  
 PR (MOLE-) APPLIED MOLECULAR EVOLUTION INC.

XX Dickinson CD, Vasserot AP, Watkins JD, Lu J;  
 XX WPI; 2004-580977/56.  
 XX New isolated antibodies that specifically bind mature human IL-1 beta,  
 PT useful for treating diseases such as rheumatoid arthritis, osteoarthritis  
 PT or neuroinflammation, or for inhibiting cartilage destruction.

XX Claim 12; SEQ ID NO 49; 79pp; English.  
 XX The present invention encompasses humanised IL-1 beta antibodies. These  
 CC antibodies are high affinity antibodies with improved stability. Reduced  
 CC deamidation and highly specific for IL-1 beta compared to the native  
 CC antibody. They have potent IL-1 beta neutralising activity. The increased  
 CC potency of an existing antibody is achieved through selective changes to  
 CC one or more amino acids. The property of the antibodies of the invention  
 CC resides primarily in the variable regions or complementarity determining  
 CC regions (CDR) of the antibody. The proposed antibodies are comprised of  
 CC light chain (CDR1, CDR2 and CDR3) and heavy chain (CDR1, CDR2 and CDR3)  
 CC antibody. Interleukin -1 beta is a pro-inflammatory cytokine which is the  
 CC primary mediator of bone and cartilage destruction. The over-production  
 CC of the IL-1 beta has been implicated in the pathogenesis of a variety of  
 CC diseases (rheumatoid arthritis, osteoarthritis, asthma, neuro-  
 CC inflammation, graft versus host disease, Crohn's disease, inflammatory  
 CC bowel disease, multiple sclerosis, Parkinson's and Alzheimer's disease  
 CC etc.). An effective amount of the IL-1 beta antibodies of the present  
 CC invention provides clinical efficacy without intolerable side effects or  
 CC toxicity. The antibodies are also useful for manufacturing a medicament  
 CC for the treatment of rheumatoid arthritis and osteoarthritis. It can be  
 CC used to inhibit cartilage destruction and neuro-inflammation (which is  
 CC associated with stroke or ischaemic, excitotoxic, or traumatic head  
 CC injury). The IL-1 beta antibodies of the invention are preferably used to  
 CC treat rheumatoid arthritis (RA), osteoarthritis (OA) and neuro-  
 CC inflammation. The IL-1 beta antibodies of the invention can be used alone  
 CC or in combination DMARDS (disease modifying antirheumatic drugs) to  
 CC reduce IL-1 beta protein levels in plasma. The invention provides the  
 CC polynucleotide sequences which encode the antibodies against IL-1 beta.  
 CC It also provides the methods for using these antibodies for the treatment  
 CC of IL-1 beta related inflammatory disorders. The isolated antibodies of  
 CC the invention are selected from the group IgG1 and IgG4. IgG antibodies  
 CC are the most abundant immunoglobulin and has the longest half-life in  
 CC serum compared to other immunoglobulin. Unlike other immunoglobulins IgG  
 CC is efficiently recirculated. The presented protein sequence is the human  
 CC W18-heavy chain.

XX Sequence 450 AA;  
 Query Match 100.0%; Score 1263; DB 8; Length 450;  
 Best Local Similarity 100.0%; Pred. NO. 3.3e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 219 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVDVSHEDPEVKF 278  
 QY 61 NMVVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGKEYCKVSNKALPAPIEKT 120  
 DB 279 NMVVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGKEYCKVSNKALPAPIEKT 338  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPSDIAVEVESNGQPENNYKTTTP 180  
 DB 339 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPSDIAVEVESNGQPENNYKTTTP 398  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVWHEALHNHYTKSLSPGK 232  
 DB 399 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVWHEALHNHYTKSLSPGK 450

RESULT 139  
 ADS18710  
 ID ADS18710 standard; protein; 450 AA.  
 XX ADS18710;  
 XX 18-NOV-2004 (first entry)  
 XX Protein sequence of human U43-heavy chain.

XX Antibody; humanised; complementarity determining region; CDR; CDR1; CDR2;  
 KW CDR3; U43-heavy chain; interleukin -1 beta; IL-1 beta; cytokine;  
 KW bone destruction; cartilage destruction; rheumatoid arthritis;  
 KW osteoarthritis; clinical efficacy; neuro-inflammation; stroke; ischaemic;  
 KW excitotoxic; traumatic head injury; inflammatory disorder; IgG; human.  
 XX Homo sapiens.

XX Key Location/Qualifiers  
 FT Misc-difference 55 /note= "This specification states that there is  
 FT elimination of deamidation at this position, however,  
 FT this residue is a Serine and not an Asparagine or  
 FT Glutamine"

XX WO2004067568-A2.  
 XX 12-AUG-2004.  
 XX 21-JAN-2004; 2004WO-US000019.  
 XX 24-JAN-2003; 2003US-0442798P.  
 XX (MOLE-) APPLIED MOLECULAR EVOLUTION INC.

XX Dickinson CD, Vasserot AP, Watkins JD, Lu J;  
 XX WPI; 2004-580977/56.  
 XX New isolated antibodies that specifically bind mature human IL-1 beta,  
 PT useful for treating diseases such as rheumatoid arthritis, osteoarthritis  
 PT or neuroinflammation, or for inhibiting cartilage destruction.

XX Claim 18; SEQ ID NO 53; 79pp; English.  
 XX The present invention encompasses humanised IL-1 beta antibodies. These  
 CC antibodies are high affinity antibodies with improved stability. Reduced  
 CC deamidation and highly specific for IL-1 beta compared to the native  
 CC antibody. They have potent IL-1 beta neutralising activity. The increased  
 CC potency of an existing antibody is achieved through selective changes to  
 CC one or more amino acids. The property of the antibodies of the invention  
 CC resides primarily in the variable regions or complementarity determining  
 CC regions (CDR) of the antibody. The proposed antibodies are comprised of  
 CC light chain (CDR1, CDR2 and CDR3) and heavy chain (CDR1, CDR2 and CDR3)  
 CC antibody. Interleukin -1 beta is a pro-inflammatory cytokine which is the  
 CC primary mediator of bone and cartilage destruction. The over-production

CC of the IL-1 beta has been implicated in the pathogenesis of a variety of  
CC diseases (rheumatoid arthritis, osteoarthritis, asthma, neuro-  
CC inflammation, graft versus host disease, Crohn's disease, inflammatory  
CC bowel disease, multiple sclerosis, Parkinson's and Alzheimer's disease  
CC etc.). An effective amount of the IL-1 beta antibodies of the present  
CC invention provides clinical efficacy without intolerable side effects or  
CC toxicity. The antibodies are also useful for manufacturing a medicament  
CC for the treatment of rheumatoid arthritis and osteoarthritis. It can be  
CC used to inhibit cartilage destruction and neuro-inflammation (which is  
CC associated with stroke or ischaemic, excitotoxic, or traumatic head  
CC injury). The IL-1 beta antibodies of the invention are preferably used to  
CC treat rheumatoid arthritis (RA), osteoarthritis (OA) and neuro-  
CC inflammation. The IL-1 beta antibodies of the invention can be used alone  
CC or in combination DMARDS (disease modifying antirheumatic drugs) to  
CC reduce IL-1 beta protein levels in plasma. The invention provides the  
CC polynucleotide sequences which encode the antibodies against IL-1 beta.  
CC It also provides the methods for using these antibodies for the treatment  
CC of IL-1 beta related inflammatory disorders. The isolated antibodies of  
CC the invention are selected from the group IgG1 and IgG4. IgG antibodies  
CC are the most abundant immunoglobulin and has the longest half-life in  
CC serum compared to other immunoglobulin. Unlike other immunoglobulins IgG  
CC is efficiently recirculated. The presented protein sequence is the human  
CC U43-heavy chain.

XX Sequence 450 AA;

Query Match 100.0%; Score 1263; DB 8; Length 450;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91; Indels 0; Gaps 0;  
Matches 232; Conservative 0; Mismatches 0;  
QY 1 EPKSCDKTHTCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 219 EPKSCDKTHTCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 278  
QY 61 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 279 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 338  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 339 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 398  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 399 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 450

RESULT 140

ADSI8702  
ID ADSI8702 standard; protein; 450 AA.

XX ADSI8702;

DT 18-NOV-2004 (first entry)

XX Protein sequence of human W13-heavy chain.

XX Antibody; humanised; complementarity determining region; CDR: CDR1; CDR2;  
XX CDR3; W13 heavy chain; interleukin -1 beta; IL-1 beta; cytokine;  
XX bone destruction; cartilage destruction; rheumatoid arthritis;  
XX osteoarthritis; clinical efficacy; neuro-inflammation; stroke; ischaemic;  
XX excitotoxic; traumatic head injury; inflammatory disorder; IgG; human.  
OS Homo sapiens.

XX Key Location/Qualifiers

FT Misc-difference 55 /note= "This specification states that there is  
FT elimination of deamidation at this position, however,  
FT this residue is a Serine and not an Asparagine or  
FT Glutamine"

XX WO2004067568-A2.

XX 12-AUG-2004.  
PD  
XX  
XX 21-JAN-2004; 2004WO-US0000019.  
PF  
XX  
XX 24-JAN-2003; 2003US-0442798P.  
PR  
XX  
XX (MOLE-) APPLIED MOLECULAR EVOLUTION INC.  
PA  
XX  
XX Dickinson CD, Vaasserot AP, Watkins JD, Lu J;  
PI  
XX  
XX WPI; 2004-580977/56.  
DR  
XX  
XX New isolated antibodies that specifically bind mature human IL-1 beta,  
XX useful for treating diseases such as rheumatoid arthritis, osteoarthritis  
XX or neuroinflammation, or for inhibiting cartilage destruction.  
PT  
XX  
XX Claim 9; SEQ ID NO 45; 79pp; English.

CC The present invention encompasses humanised IL-1 beta antibodies. These  
CC antibodies are high affinity antibodies with improved stability, reduced  
CC deamidation and highly specific for IL-1 beta compared to the native  
CC antibody. They have potent IL-1 beta neutralising activity. The increased  
CC potency of an existing antibody is achieved through selective changes to  
CC one or more amino acids. The property of the antibodies of the invention  
CC resides primarily in the variable regions or complementarity determining  
CC regions (CDR) of the antibody. The proposed antibodies are comprised of  
CC light chain (CDR1, CDR2 and CDR3) and heavy chain (CDR1, CDR2 and CDR3)  
CC antibody. Interleukin -1 beta is a pro-inflammatory cytokine which is the  
CC primary mediator of bone and cartilage destruction. The over-production  
CC of the IL-1 beta has been implicated in the pathogenesis of a variety of  
CC diseases (rheumatoid arthritis, osteoarthritis, asthma, neuro-  
CC inflammation, graft versus host disease, Crohn's disease, inflammatory  
CC bowel disease, multiple sclerosis, Parkinson's and Alzheimer's disease  
CC etc.). An effective amount of the IL-1 beta antibodies of the present  
CC invention provides clinical efficacy without intolerable side effects or  
CC toxicity. The antibodies are also useful for manufacturing a medicament  
CC for the treatment of rheumatoid arthritis and osteoarthritis. It can be  
CC used to inhibit cartilage destruction and neuro-inflammation (which is  
CC associated with stroke or ischaemic, excitotoxic, or traumatic head  
CC injury). The IL-1 beta antibodies of the invention are preferably used to  
CC treat rheumatoid arthritis (RA), osteoarthritis (OA) and neuro-  
CC inflammation. The IL-1 beta antibodies of the invention can be used alone  
CC or in combination DMARDS (disease modifying antirheumatic drugs) to  
CC reduce IL-1 beta protein levels in plasma. The invention provides the  
CC polynucleotide sequences which encode the antibodies against IL-1 beta.  
CC It also provides the methods for using these antibodies for the treatment  
CC of IL-1 beta related inflammatory disorders. The isolated antibodies of  
CC the invention are selected from the group IgG1 and IgG4. IgG antibodies  
CC are the most abundant immunoglobulin and has the longest half-life in  
CC serum compared to other immunoglobulin. Unlike other immunoglobulins IgG  
CC is efficiently recirculated. The presented protein sequence is the human  
CC W13-heavy chain.

XX Sequence 450 AA;

Query Match 100.0%; Score 1263; DB 8; Length 450;  
Best Local Similarity 100.0%; Pred. No. 3.3e-91; Indels 0; Gaps 0;  
Matches 232; Conservative 0; Mismatches 0;  
QY 1 EPKSCDKTHTCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 219 EPKSCDKTHTCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 278  
QY 61 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 279 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 338  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 339 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 398  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232

|||||  
399 PVLDSGSPFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 450

RESULT 141  
ADS18708  
ID ADS18708 standard; protein; 450 AA.  
XX AC ADS18708;  
XX DT 18-NOV-2004 (first entry)  
XX DE Protein sequence of human W20-heavy chain.  
XX KW Antibody; humanised; complementarity determining region; CDR; CDR1; CDR2;  
KW CDR3; W20-heavy chain; interleukin -1 beta; IL-1 beta; cytokine;  
KW bone destruction; cartilage destruction; rheumatoid arthritis;  
KW osteoarthritis; clinical efficacy; neuro-inflammation; stroke; ischaemic;  
KW excitotoxic; traumatic head injury; inflammatory disorder; IgG; human.  
XX OS Homo sapiens.  
XX FH Key Location/Qualifiers  
FT Misc-difference 55 /note= "this specification states that there is  
FT elimination of deamidation at this position, however,  
FT this residue is a Serine and not an Asparagine or  
FT Glutamine"  
XX PN W2004067568-A2.  
XX PD 12-AUG-2004.  
XX PF 21-JAN-2004; 2004WO-US000019.  
XX PR 24-JAN-2003; 2003US-0442798P.  
XX PA (MOLE-) APPLIED MOLECULAR EVOLUTION INC.  
XX PI Dickinson CD, Vasserot AP, Watkins JD, Lu J;  
XX WPI; 2004-580977/56.  
XX DR  
XX PT New isolated antibodies that specifically bind mature human IL-1 beta,  
PT useful for treating diseases such as rheumatoid arthritis, osteoarthritis  
PT or neuroinflammation, or for inhibiting cartilage destruction.  
XX PS Claim 15; SEQ ID NO 51; 79pp; English.  
XX CC The present invention encompasses humanised IL-1 beta antibodies. These  
CC antibodies are high affinity antibodies with improved stability, reduced  
CC deamidation and highly specific for IL-1 beta compared to the native  
CC antibody. They have potent IL-1 beta neutralising activity. The increased  
CC potency of an existing antibody is achieved through selective changes to  
CC one or more amino acids. The property of the antibodies of the invention  
CC resides primarily in the variable regions or complementarity determining  
CC regions (CDR) of the antibody. The proposed antibodies are comprised of  
CC light chain (CDR1, CDR2 and CDR3) and heavy chain (CDR1, CDR2 and CDR3)  
CC antibody. Interleukin -1 beta is a pro-inflammatory cytokine which is the  
CC primary mediator of bone and cartilage destruction. The over-production  
CC of the IL-1 beta has been implicated in the pathogenesis of a variety of  
CC diseases (rheumatoid arthritis, osteoarthritis, asthma, neuro-  
CC inflammation, graft versus host disease, Crohn's disease, inflammatory  
CC bowel disease, multiple sclerosis, Parkinson's and Alzheimer's disease  
CC ecc.). An effective amount of the IL-1 beta antibodies of the present  
CC invention provides clinical efficacy without intolerable side effects or  
CC toxicity. The antibodies are also useful for manufacturing a medicament  
CC for the treatment of rheumatoid arthritis and osteoarthritis. It can be  
CC used to inhibit cartilage destruction and neuro-inflammation (which is  
CC associated with stroke or ischaemic, excitotoxic, or traumatic head  
CC injury). The IL-1 beta antibodies of the invention are preferably used to  
CC treat rheumatoid arthritis (RA), osteoarthritis (OA) and neuro-  
CC inflammation. The IL-1 beta antibodies of the invention can be used alone

CC or in combination DMARDS (disease modifying antirheumatic drugs) to  
CC reduce IL-1 beta protein levels in plasma. The invention provides the  
CC polynucleotide sequences which encode the antibodies against IL-1 beta.  
CC It also provides the methods for using these antibodies for the treatment  
CC of IL-1 beta related inflammatory disorders. The isolated antibodies of  
CC the invention are selected from the group IgG1 and IgG4. IgG antibodies  
CC are the most abundant immunoglobulin and has the longest half-life in  
CC serum compared to other immunoglobulin. Unlike other immunoglobulins IgG  
CC is efficiently recirculated. The presented protein sequence is the human  
CC W20-heavy chain.  
XX DT 18-NOV-2004 (first entry)  
XX DE Protein sequence of human W20-heavy chain.  
XX KW Antibody; humanised; complementarity determining region; CDR; CDR1; CDR2;  
KW CDR3; W20-heavy chain; interleukin -1 beta; IL-1 beta; cytokine;  
KW bone destruction; cartilage destruction; rheumatoid arthritis;  
KW osteoarthritis; clinical efficacy; neuro-inflammation; stroke; ischaemic;  
KW excitotoxic; traumatic head injury; inflammatory disorder; IgG; human.  
XX OS Homo sapiens.  
XX FH Key Location/Qualifiers  
FT Misc-difference 55 /note= "this specification states that there is  
FT elimination of deamidation at this position, however,  
FT this residue is a Serine and not an Asparagine or  
FT Glutamine"  
XX PN W2004067568-A2.  
XX PD 12-AUG-2004.  
XX PF 21-JAN-2004; 2004WO-US000019.  
XX PR 24-JAN-2003; 2003US-0442798P.  
XX PA (MOLE-) APPLIED MOLECULAR EVOLUTION INC.  
XX PI Dickinson CD, Vasserot AP, Watkins JD, Lu J;  
XX WPI; 2004-580977/56.  
XX DR  
XX PT New isolated antibodies that specifically bind mature human IL-1 beta,  
PT useful for treating diseases such as rheumatoid arthritis, osteoarthritis  
PT or neuroinflammation, or for inhibiting cartilage destruction.  
XX PS Claim 15; SEQ ID NO 51; 79pp; English.  
XX CC The present invention encompasses humanised IL-1 beta antibodies. These  
CC antibodies are high affinity antibodies with improved stability, reduced  
CC deamidation and highly specific for IL-1 beta compared to the native  
CC antibody. They have potent IL-1 beta neutralising activity. The increased  
CC potency of an existing antibody is achieved through selective changes to  
CC one or more amino acids. The property of the antibodies of the invention  
CC resides primarily in the variable regions or complementarity determining  
CC regions (CDR) of the antibody. The proposed antibodies are comprised of  
CC light chain (CDR1, CDR2 and CDR3) and heavy chain (CDR1, CDR2 and CDR3)  
CC antibody. Interleukin -1 beta is a pro-inflammatory cytokine which is the  
CC primary mediator of bone and cartilage destruction. The over-production  
CC of the IL-1 beta has been implicated in the pathogenesis of a variety of  
CC diseases (rheumatoid arthritis, osteoarthritis, asthma, neuro-  
CC inflammation, graft versus host disease, Crohn's disease, inflammatory  
CC bowel disease, multiple sclerosis, Parkinson's and Alzheimer's disease  
CC ecc.). An effective amount of the IL-1 beta antibodies of the present  
CC invention provides clinical efficacy without intolerable side effects or  
CC toxicity. The antibodies are also useful for manufacturing a medicament  
CC for the treatment of rheumatoid arthritis and osteoarthritis. It can be  
CC used to inhibit cartilage destruction and neuro-inflammation (which is  
CC associated with stroke or ischaemic, excitotoxic, or traumatic head  
CC injury). The IL-1 beta antibodies of the invention are preferably used to  
CC treat rheumatoid arthritis (RA), osteoarthritis (OA) and neuro-  
CC inflammation. The IL-1 beta antibodies of the invention can be used alone

RESULT 142  
AAE12715  
ID AAE12715 standard; protein; 451 AA.  
XX AC AAE12715;  
XX DT 04-JAN-2002 (first entry)  
XX DE Human recombinant immunoglobulin (Ig) heavy chain region.  
XX KW Human; tumour-associated antigen mucin-1; MUC-1; adenocarcinoma;  
KW heavy chain region; cancer; breast; ovary; lung; bladder; cytostatic;  
KW therapy; immunoglobulin; Ig.  
XX OS Homo sapiens.  
XX PN W200175110-A2.  
XX PD 11-OCT-2001.  
XX PF 30-MAR-2001; 2001WO-US010589.  
XX PR 30-MAR-2000; 2000US-00538913.  
XX PA (DYAX-) DYAX CORP.  
XX PI Hoogenboom HRJM, Henderikx MPG;  
XX WPI; 2001-626437/72.  
XX N-PSDB; AAD20745.

Novel isolated tumor-associated antigen mucin-1-specific binding member  
PT for diagnosing and treating cancer, comprises mucin-1 binding domain or  
PT its portion for binding to an epitope of the protein core of mucin-1.  
XX Claim 12; Page 106-108; 126pp; English.  
XX The invention relates to an isolated tumour-associated antigen mucin-1  
CC (MUC-1)-specific binding member comprising an antigen binding domain

CC region having an antibody variable light (VL) or heavy (VH) region, or a  
 CC complementarity determining region (CDR) of VL or VH. MUC1-specific  
 CC binding member is useful for diagnosing cancer, preferably adenocarcinoma  
 CC The binding of MUC1-specific binding member to MUC1 is detected by a  
 CC detection method selected from enzyme-linked immunosorbent assay,  
 CC magnetic resonance imaging, scintillation counting, and X-ray film. MUC1-  
 CC specific binding member is useful for treating cancer, preferably  
 CC adenocarcinoma, in an individual, where the cancer is present in tissue  
 CC of the breast, ovary, lung, or bladder of the individual. MUC1-specific  
 CC binding member is useful for diagnosing and imaging MUC1-expressing  
 CC cancer cells and tissues, for purifying or isolating non-glycosylated,  
 CC underglycosylated or cancer-associated forms of MUC1 or MUC1 epitope-  
 CC containing molecules, and for therapeutically or prophylactically  
 CC treating cancer. The present sequence is human recombinant immunoglobulin  
 CC (Ig) heavy chain region (variable VH and CH constant heavy chain)  
 XX  
 SQ Sequence 451 AA;

Query Match 100.0%; Score 1263; DB 4; Length 451;  
 Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPAPALLGGPSVFLPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 220 EPKSCDKTHTCPPAPALLGGPSVFLPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 279  
 QY 61 NMYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 120  
 DB 280 NMYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 339  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 399  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 400 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 451

RESULT 143  
 AAU81014  
 ID AAU81014 standard; protein; 451 AA.  
 AC AAU81014;  
 XX  
 XX  
 DT 09-APR-2002 (first entry)  
 XX  
 DE B7-related protein, BSL3-Ig fusion construct.

XX Human; immunosuppressive; antirheumatic; antiarthritic; antiulcer;  
 KW antianaemic; antipsoriatic; B7-related polypeptide; BSL1; BSL2; BSL3;  
 KW autoimmune disease; rheumatoid arthritis; multiple sclerosis;  
 KW Hashimoto's thyroiditis; Graves' disease; Crohn's disease; psoriasis;  
 KW ulcerative colitis; pernicious anaemia; bone marrow transplantation;  
 KW graft versus host disease; organ transplantation.

XX Homo sapiens.  
 OS Synthetic.  
 XX  
 XX WO200194413-A2.

PN 13-DEC-2001.

XX 06-JUN-2001; 2001WO-US018257.

XX 06-JUN-2000; 2000US-0209811P.

PR 28-FEB-2001; 2001US-0272107P.

XX (BRIM ) BRISTOL-MYERS SQUIBB CO.

XX Mikesell GE, Chang H, Finger JN, Yang G, Lu P, Zhou X, Peach R;

XX WPI; 2002-090141/12.

DR N-PSDB; ABK24018.  
 XX  
 XX Nucleic acids encoding B7-related polypeptides, i.e. BSL1, BSL2, or BSL3  
 PT polypeptides, useful for treating autoimmune diseases (e.g. rheumatoid  
 PT arthritis, multiple sclerosis, and psoriasis), and graft versus host  
 PT disease.  
 XX

PS Example 6; Fig 6B; 179pp; English.

XX The invention relates to novel nucleic acids encoding B7-related  
 CC polypeptides. The B7-related polypeptides include the BSL1, BSL2, or BSL3  
 CC polypeptides, or their soluble fragments. The nucleic acid, polypeptide,  
 CC and antibodies are useful for treating autoimmune diseases (e.g.  
 CC rheumatoid arthritis, multiple sclerosis, Hashimoto's thyroiditis,  
 CC Graves' disease, Crohn's disease, ulcerative colitis, pernicious anaemia  
 CC and psoriasis). They may also be used to treat tissue, bone marrow, and  
 CC organ transplantation, and graft versus host disease. AAU81007-AAU81015  
 CC represent B7-related proteins, BSL1, BSL2 and BSL3 amino acid sequences  
 CC and related sequences of the invention  
 XX  
 SQ Sequence 451 AA;

Query Match 100.0%; Score 1263; DB 5; Length 451;  
 Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPAPALLGGPSVFLPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 220 EPKSCDKTHTCPPAPALLGGPSVFLPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 279

QY 61 NMYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 120  
 DB 280 NMYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 339

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 399

QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 400 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 451

RESULT 144  
 ABU58807  
 ID ABU58807 standard; protein; 451 AA.  
 XX AC ABU58807;  
 XX

DT 15-APR-2003 (first entry)

XX Mucin 1 (MUC-1) binding immunoglobulin kappa heavy chain.

XX Mucin-1-specific binding member; human; cancer; adenocarcinoma;  
 KW breast cancer; ovarian cancer; bladder cancer; lung cancer;  
 KW anti-cancer regimen; anti-cancer drug; radiation treatment.

XX Homo sapiens.

XX US2002146750-A1.

PN 10-OCT-2002.

XX 30-MAR-2001; 2001US-00822698.

XX 30-MAR-2000; 2000US-00538913.

PR (HOOG/) HOOGENDOORN H R J M.

XX (HEND/) HENDERIKX M P G.

XX Hoogenboom HRJM, Henderikx MPG;

XX WPI; 2003-198057/19.

DR N-PSDB; ABX79100.  
 XX  
 PT Isolated mucin-1-specific binding member for diagnosing and/or treating  
 PT cancer, e.g. breast cancer, comprises antigen binding domain having  
 PT region that contains specific amino acid sequence.  
 XX  
 PS Claim 12; Page 41-42; 70pp; English.  
 XX  
 CC The invention describes an isolated mucin-1-specific binding member  
 CC having an antigen binding domain including a region that comprises a  
 CC specific amino acid sequence. The inventive MUC1-specific binding member  
 CC is used in the diagnosis and/or treatment of cancer, e.g. adenocarcinoma,  
 CC found in various tissues, e.g. breast, ovary, bladder, and lung. It can  
 CC be used alone or as a component in a more complex anti-cancer regimen  
 CC which may contain anti-cancer drug(s) and/or radiation treatment(s). The  
 CC inventive binding member recognizes tumour-associated MUC1 on  
 CC adenocarcinoma. Its affinity is high enough to bind to tumour cells. This  
 CC is the amino acid sequence of a mucin 1 (MUC-1) specific antibody region  
 CC used to isolate MUC-1 antigen binding domains for use in the treatment of  
 CC cancer  
 XX  
 SQ Sequence 451 AA;  
 Query Match 100.0%; Score 1263; DB 6; Length 451;  
 Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKHTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 220 EPKSCDKHTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 279  
 QY 61 NWTVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 280 NWTVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 339  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 399  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 400 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 451  
 RESULT 145  
 ADL92472  
 ID ADL92472 standard; protein; 451 AA.  
 AC  
 AC ADL92472;  
 DT 01-JUL-2004 (first entry)  
 XX  
 DE Antibody "Rituximab" heavy chain sequence.  
 XX  
 KW cytostatic; antiinflammatory; cardiovascular; gene therapy; antibody; Fc;  
 KW agriculture; industrial application.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004029207-A2.  
 XX  
 PD 08-APR-2004.  
 XX  
 PF 26-SEP-2003; 2003WO-US030249.  
 XX  
 PR 27-SEP-2002; 2002US-0414433P.  
 XX  
 PR 23-JAN-2003; 2003US-0442301P.  
 PR 02-MAY-2003; 2003US-0467606P.  
 PR 12-JUN-2003; 2003US-0477839P.  
 XX  
 PA (XENC-) XENCOR.  
 XX  
 PI Lazar GA, Chirino AJ, Dang W, Desjarlais JR, Doberstein SK;  
 XX  
 XX

PI Hayes RJ, Karki SB, Vafa O;  
 XX  
 DR WPI; 2004-316096/29.  
 XX  
 PT New optimized Fc variant antibody useful for diagnosing or treating  
 PT diseases (e.g. cancer, inflammation or cardiovascular diseases), in  
 PT research and in agricultural or industrial applications.  
 XX  
 PS Example 12; Fig 31b; 192pp; English.  
 XX  
 CC The invention relates to an antibody comprising an Fc variant portion  
 CC having an amino acid modification in the Fc region of the parent Fc  
 CC polypeptide, where the Fc variant modulates binding to an Fc-gamma-R  
 CC compared to the parent Fc polypeptide. The antibody may also be used in  
 CC research and in agricultural or industrial applications. This sequence  
 CC corresponds to the heavy chain of the antibody "Rituximab" as an example  
 CC of an antibody of the invention.  
 XX  
 SQ Sequence 451 AA;  
 Query Match 100.0%; Score 1263; DB 8; Length 451;  
 Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKHTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 220 EPKSCDKHTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 279  
 QY 61 NWTVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 280 NWTVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 339  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 399  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 400 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 451  
 RESULT 146  
 ADL92469  
 ID ADL92469 standard; protein; 451 AA.  
 XX  
 AC ADL92469;  
 XX  
 DT 01-JUL-2004 (first entry)  
 XX  
 DE Antibody ALEMTUZUMAB (RTM) heavy chain sequence.  
 XX  
 KW cytostatic; antiinflammatory; cardiovascular; gene therapy; antibody; Fc;  
 KW agriculture; industrial application.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004029207-A2.  
 XX  
 PD 08-APR-2004.  
 XX  
 PF 26-SEP-2003; 2003WO-US030249.  
 XX  
 PR 27-SEP-2002; 2002US-0414433P.  
 PR 23-JAN-2003; 2003US-0442301P.  
 PR 02-MAY-2003; 2003US-0467606P.  
 PR 12-JUN-2003; 2003US-0477839P.  
 XX  
 PA (XENC-) XENCOR.  
 XX  
 PI Lazar GA, Chirino AJ, Dang W, Desjarlais JR, Doberstein SK;  
 PI Hayes RJ, Karki SB, Vafa O;  
 XX  
 DR WPI; 2004-316096/29.

XX New optimized Fc variant antibody useful for diagnosing or treating  
PT diseases (e.g. cancer, inflammation or cardiovascular diseases), in  
PT research and in agricultural or industrial applications.  
XX  
XX Disclosure; Fig 5; 192pp; English.  
XX  
XX The invention relates to an antibody comprising an Fc variant portion  
CC having an amino acid modification in the Fc region of the parent Fc  
CC polypeptide, where the Fc variant modulates binding to an Fc-gamma-R  
CC compared to the parent Fc polypeptide. The antibody may also be used in  
CC research and in agricultural or industrial applications. This sequence  
CC corresponds to the heavy chain of the antibody "Aleutuzumab" (Campath  
CC (RTM) for ILEX Pharmaceuticals LP) and is an example of an antibody of  
CC the invention.  
XX  
XX Sequence 451 AA;  
SQ  
Query Match 100.0%; Score 1263; DB 8; Length 451;  
Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 220 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 279  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
DB 280 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 339  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 399  
QY 181 PVLDSGGSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
DB 400 PVLDSGGSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 451  
RESULT 147  
ADP88494  
ID ADP88494 standard; protein; 451 AA.  
XX  
AC ADP88494;  
XX  
DT 09-SEP-2004 (first entry)  
XX  
DE Humanised CD8 antibody heavy chain SEQ ID NO: 33.  
XX  
KW immunosuppressive; transplant rejection; antigen tolerance; antibody;  
KW TRX1; CD8.  
XX  
OS Unidentified.  
XX  
PN WO2004052398-A1.  
XX  
PD 24-JUN-2004.  
XX  
PF 09-DEC-2003; 2003WO-US039165.  
XX  
PR 09-DEC-2002; 2002US-0431839P.  
XX  
XX (TOLE-) TOLERR INC.  
XX  
XX Windsor-Hines D, Rao P, Ringler DJ;  
XX  
XX WPI; 2004-468712/44.  
DR N-PSDB; ADP88456.  
XX  
PT Treating a primate to induce tolerance to at least one antigen comprises  
PT administering at least one anti-CD4 antibody or its fragment in an  
PT initial dose of at least 40 mg/kg and at least one compound that inhibits  
PT CD8+ T cells.

XX Example 5; SEQ ID NO 33; 113pp; English.  
XX  
XX The present invention relates to a process of treating a primate to  
CC induce tolerance to at least one antigen, which comprises administering  
CC to the primate at least one anti-CD4 antibody or its fragment in an  
CC initial dose of at least 40 mg/kg and at least one compound that inhibits  
CC CD8+ T cells, where the anti-CD4 antibody or its fragment is present in  
CC the primate when the antigen is present in the primate. The method is  
CC useful in treating a primate to induce tolerance to at least one foreign  
CC antigen to prevent transplant rejection. The present sequence is an  
CC antibody fragment used in the exemplification of the invention.  
XX  
XX Sequence 451 AA;  
SQ  
Query Match 100.0%; Score 1263; DB 8; Length 451;  
Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 220 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 279  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
DB 280 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 339  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 399  
QY 181 PVLDSGGSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
DB 400 PVLDSGGSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 451  
RESULT 148  
AAY30201  
ID AAY30201 standard; protein; 452 AA.  
XX  
AC AAY30201;  
XX  
DT 17-OCT-2003 (revised)  
DT 01-NOV-1999 (first entry)  
XX  
DE Heavy chain sequence of chimeric anti-CD40 antibody chi220.  
XX  
KW Heavy chain variable region; chimeric antibody; anti-CD40 antibody;  
KW chi220; humoral immune response; T cell dependent antigen;  
KW collagen induced arthritis; transplant induced rejection;  
KW T cell mediated disorder; autoimmune disease; inflammatory disease;  
KW transplantation.  
XX  
OS Mus sp.  
OS Homo sapiens.  
OS Chimeric.  
XX  
XX WO9942075-A2.  
XX  
XX 26-AUG-1999.  
XX  
XX 10-FEB-1999; 99WO-US002949.  
XX  
XX 19-FEB-1998; 98US-00026291.  
XX  
XX (BRIM ) BRISTOL-MYERS SQUIBB CO.  
XX  
XX Aruffo AA, Hollenbaugh D, Stadak AW, Berry KK, Harris LJ;  
PI Thorne BA, Bajorath J, Wu H, Huse WD, Watkins JD;  
XX  
XX WPI; 1999-527408/44.  
XX  
XX Antibody that binds human CD40, for treating T cell mediated disorders.

```
XX PS Claim 6; Page 20; 77pp; English.
XX CC The present sequence represents the heavy chain of a chimeric anti-CD40
XX CC antibody designated chi220. The antibodies are effective in modulating
XX CC humoral immune response against T cell dependent antigens, collagen
XX CC induced arthritis and transplant induced rejection. They are also useful
XX CC for their anti-inflammatory properties. The antibodies have wide
XX CC therapeutic applications, including autoimmune and inflammatory diseases
XX CC and transplantation. The antibody can be used in a pharmaceutical
XX CC composition for treating a patient suffering from a T cell mediated
XX CC disorder. They can also be used to treat autoimmune diseases,
XX CC inflammatory diseases, and transplantation. (Updated on 17-OCT-2003 to
XX CC standardise OS field)
SQ Sequence 452 AA;

Query Match 100.0%; Score 1263; DB 2; Length 452;
Best Local Similarity 100.0%; Pred. No. 3.4e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 221 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 280

QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
DB 281 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 340

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
DB 341 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 400

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 232
DB 401 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 452

RESULT 149
AAY97591
ID AAY97591 standard; protein; 452 AA.
XX AC AAY97591;
XX DT 05-APR-2001 (first entry)
XX DE Flt1 receptor fusion protein Mut2:Flt1(2-3deltaB)-Fc.
XX KW Flt1 receptor; fusion protein; chimeric protein; pharmacokinetic;
XX KW plasma leakage; vascular permeability; IgG Fc region.
XX OS Unidentified.
XX PN WO200075319-A1.
XX PD 14-DEC-2000.
XX PF 23-MAY-2000; 2000WO-US014142.
XX PR 08-JUN-1999; 99US-0138133P.
XX PA (REGE-) REGENERON PHARM INC.
XX PI Papadopoulos NJ, Davis S, Yancopoulos GD;
XX DR WPI; 2001-071076/08.
XX DR N-PSDB; AAA91071.
XX PT Nucleic acid molecule encoding mammalian phospholipid transfer protein,
XX PT and its fragments, useful for diagnosis, evaluation, and treatment of
XX PT diseases associated with the gene expression and for producing model
XX PT systems.
XX XX

PS Claim 49; Fig 14; 159pp; English.
XX CC This sequence represents a fusion protein of the invention between the
XX CC Flt1 receptor and the Fc region of IgG. The specification relates to
XX CC modified chimeric polypeptides with improved pharmacokinetics. The
XX CC modified chimeric polypeptides are preferably Flt1 receptor polypeptides
XX CC that have been modified to improve their pharmacokinetic profile. The
XX CC polypeptides can be used to decrease or inhibit plasma leakage and/or
XX CC vascular permeability in a mammal
SQ Sequence 452 AA;

Query Match 100.0%; Score 1263; DB 4; Length 452;
Best Local Similarity 100.0%; Pred. No. 3.4e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 221 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 280

QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
DB 281 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 340

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
DB 341 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 400

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 232
DB 401 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 452

RESULT 150
ABP52444
ID ABP52444 standard; protein; 452 AA.
XX AC ABP52444;
XX DT 23-OCT-2002 (first entry)
XX DE Mutation 2 Flt1(2-3 delta B)-Fc protein sequence.
XX KW Human; Flt1; vascular endothelial growth factor; VEGF; VEGF antagonist;
XX KW psoriasis; wound healing; Flt1 receptor; antipsoriatic; antiinflammatory;
XX KW vulnary; antiasthmatic; antirheumatic; antiarthritic; nephrotropic;
XX KW ophthalmological; vascular permeability; oedema; inflammation; asthma;
XX KW brain oedema; inflammatory disorder; rheumatoid arthritis; burn;
XX KW kidney disease; eye disorder; age-related macular degeneration;
XX KW diabetic retinopathy.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO200260489-A1.
XX PD 08-AUG-2002.
XX PF 28-JAN-2002; 2002WO-US002466.
XX PR 31-JAN-2001; 2001US-00773877.
XX PA (REGE-) REGENERON PHARM INC.
XX PI Xia Y, Rudge JS, Yancopoulos GD;
XX DR WPI; 2002-608488/65.
XX DR N-PSDB; ABQ74605.
XX PT Treating psoriasis and enhancing wound healing in humans comprises the
XX PT administration of a vascular endothelial cell growth factor (VEGF)
XX PT antagonist.
XX XX
```

Example 12; Fig 14A-C; 179pp; English.

PS The present invention describes a method for treating psoriasis and  
 XX enhancing wound healing in a mammal or a human. The method comprises  
 CC administering a vascular endothelial cell growth factor (VEGF) antagonist  
 CC to the mammal or human. A VEGF antagonist has antipsoriatic,  
 CC antiinflammatory, vulvar, antiasthmatic, antirheumatic, antiarthritic,  
 CC nephrotropic and ophthalmological activities. The method can be used in  
 CC treating psoriasis and enhancing wound healing in humans by administering  
 CC VEGF antagonist. The method is also useful in treating clinical  
 CC conditions characterised by vascular permeability, oedema or  
 CC inflammation, such as brain oedema associated with injury, oedema  
 CC associated with inflammatory disorders (e.g. rheumatoid arthritis),  
 CC asthma, burns, kidney diseases, or eye disorders such as age-related  
 CC macular degeneration and diabetic retinopathy. The method may also be  
 CC used in making the polypeptide to decrease or inhibit plasma leakage and  
 CC or vascular permeability. The present sequence represents Mut2:Fit1(2-3  
 CC delta B)-Fc which is used in an example from the present invention  
 XX  
 SQ Sequence 452 AA;

Query Match 100.0%; Score 1263; DB 5; Length 452;  
 Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKHTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 221 EPKSCDKHTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 280  
 QY 61 NWYVDGVEVHNAKTPREEQYNTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 281 NWYVDGVEVHNAKTPREEQYNTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 340  
 QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
 Db 341 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 400  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 232  
 Db 401 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 452

RESULT 151  
 ABP58287  
 ID ABP58287 standard; protein; 453 AA.  
 AC ABP58287;  
 XX  
 XX 23-OCT-2003 (revised)  
 DT 31-MAR-2003 (first entry)  
 XX  
 XX Humanised 10D5 antibody heavy chain.  
 DE  
 XX Monoclonal antibody; 10D5; complementarity determining region; CDR;  
 KW mouse; human; humanised antibody; antibody; Alzheimer's disease;  
 KW Down's syndrome; cerebral amyloid angiopathy; neuroprotective; nootropic.  
 XX  
 OS Mus sp.  
 OS Homo sapiens.  
 OS Chimeric.  
 XX  
 XX Key Location/Qualifiers  
 FT Region 1..123  
 FT /note= "light chain variable region"  
 FT Region 31..35  
 FT /note= "CDR1"  
 FT Region 52..67  
 FT /note= "CDR2"  
 FT Region 100..112  
 FT /note= "CDR3"  
 FT  
 XX WO200208307-A2.  
 PN  
 XX

PD 07-NOV-2002.  
 XX  
 XX 26-APR-2002; 2002WO-US011854.  
 XX  
 XX 30-APR-2001; 2001US-0287653P.  
 PR  
 XX (ELIL ) LILLY & CO ELI.  
 PA  
 XX Hinton PR, Vasquez M;  
 PI  
 XX WPI; 2003-183836/18.  
 DR  
 XX New humanized 10D5 antibody, useful for the manufacture of a medicament  
 PT for treating Down's syndrome, clinical or pre-clinical Alzheimer's  
 PT disease or cerebral amyloid angiopathy.  
 PT  
 XX Claim 5; Page 10-12; 52pp; English.  
 PS  
 XX The present sequence is the protein sequence of the heavy chain of a  
 CC humanised antibody of the present invention. In the variable portion, the  
 CC complementarity determining regions (CDRs) originate from murine  
 CC monoclonal antibody 10D5 and the framework region originates from human  
 CC germline VH segment Dp-28 and J segment JH4. Novel humanised antibodies  
 CC of the invention have CDRs from 10D5 and human framework sequences. These  
 CC humanised antibodies have binding affinities (affinity and epitope  
 CC location) approximately the same as those of the mouse 10D5 antibody. The  
 CC invention includes antibodies, single chain antibodies, and their  
 CC fragments, as well as nucleotide sequences, vectors, transformed host  
 CC cells, and methods of using the humanised antibody to treat, prevent,  
 CC alleviate, reverse or otherwise ameliorate symptoms and/or pathology  
 CC associated with Down's syndrome, (pre-)clinical Alzheimer's disease or  
 CC (pre-)clinical cerebral amyloid angiopathy, and to inhibit formation or  
 CC reduce Abeta plaque in the brain. (Updated on 23-OCT-2003 to standardise  
 CC OS field)  
 XX  
 SQ Sequence 453 AA;  
 Query Match 100.0%; Score 1263; DB 6; Length 453;  
 Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKHTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 222 EPKSCDKHTCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 281  
 QY 61 NWYVDGVEVHNAKTPREEQYNTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 282 NWYVDGVEVHNAKTPREEQYNTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 341  
 QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
 Db 342 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 401  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 232  
 Db 402 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSPGK 453  
 RESULT 152  
 ABP96295  
 ID ABP96295 standard; protein; 453 AA.  
 XX  
 XX ABP96295;  
 AC  
 XX  
 XX 20-MAY-2003 (first entry)  
 DT  
 XX  
 XX 4A5-3.1.1-B4 antibody amino acid sequence #2.  
 DE  
 XX Anti-hTNFSP13b human antibody; antibody; human; TNFSP13b; antiulcer;  
 KW immunosuppressive; antiinflammatory; dermatological; antirheumatic;  
 KW antiarthritic; antiaschmatic; antiallergic; antipsoriatic; antiparasitic;  
 KW antinfertility; antithyroid; thyromimetic; haemostatic; cytostatic;  
 KW tumour necrosis factor antagonist; TNF antagonist; rheumatoid arthritis;  
 KW

KW systemic lupus erythematosus; juvenile chronic arthritis; Lyme arthritis;  
KW Crohn's disease; ulcerative colitis; inflammatory bowel disease; asthma;  
KW allergic disease; psoriasis; immune disease; organ transplant rejection;  
KW graft-versus-host disease; sarcoidosis; infectious disease; cancer;  
KW parasitic disease; female infertility; autoimmune thrombocytopenia;  
KW autoimmune thyroid disease; Hashimoto's disease; Sjogren's syndrome.  
XX

OS Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers  
XX Region 24..34  
FT /label= CDR1  
FT Region 50..56  
FT /label= CDR2  
FT Region 89..97  
FT /label= CDR3  
XX

XX WO2003016468-A2.

XX 27-FEB-2003.

XX 15-AUG-2002; 2002WO-US021842.

XX 16-AUG-2001; 2001US-0312808P.

XX (BLIL ) LILLY & CO ELI.

XX Gelfanova VP, Hale JE, Kikly KK, Witcher DR, Rathnachalam R;  
XX

XX WPI; 2003-268308/26.

XX New anti-HTNF5F13b human antibody, useful in manufacturing a medicament  
PT for inhibiting TNF5F13b activity in a subject suffering from a disorder  
PT in which TNF5F13b activity is detrimental, e.g. asthma, cancer or  
PT rheumatoid arthritis.  
XX

PS Example 8; Page 34; 52pp; English.

XX The present invention describes an anti-HTNF5F13b human antibody (I). (I)  
CC has immunosuppressive, antiinflammatory, dermatological, antiulcer,  
CC antirheumatic, antiarthritic, antiasthmatic, antiallergic, antipsoaritic,  
CC antiparasitic, antinfertility, antithyroid, thyromimetic, haemostatic  
CC and cytostatic activities, and can be used as a tumour necrosis factor  
CC (TNF) antagonist. The anti-HTNF5F13b human antibody or an antibody that  
CC neutralises TNF5F13b activity by binding an epitope of TNF5F13b is useful  
CC in manufacturing a medicament for administering to a subject suffering  
CC from a disorder in which TNF5F13b activity is detrimental, e.g. systemic  
CC lupus erythematosus, rheumatoid arthritis, juvenile chronic arthritis,  
CC Lyme arthritis, Crohn's disease, ulcerative colitis, inflammatory bowel  
CC disease, asthma, allergic diseases, psoriasis, acute or chronic immune  
CC disease associated with organ transplantation, organ transplant  
CC rejection, graft-versus-host disease, sarcoidosis, infectious diseases,  
CC parasitic diseases, female infertility, autoimmune thrombocytopenia,  
CC autoimmune thyroid disease, Hashimoto's disease, Sjogren's syndrome, or  
CC cancer. The present sequence represents a 4A5-3.1.1-B4 antibody amino  
CC acid sequence, which is used in an example from the present invention  
XX

XX Sequence 453 AA;

Query Match 100.0%; Score 1263; DB 6; Length 453;  
Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDRLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 222 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDRLMISRTPEVTCVVDVSHEDPEVKF 281

QY 61 NWYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 282 NWYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 341

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180

DB 342 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 401  
QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTOKSLSLSPGK 232  
DB 402 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTOKSLSLSPGK 453

RESULT 153

AAR42066

ID AAR42066 standard; protein; 459 AA.

XX AAR42066;

XX 25-MAR-2003 (revised)

DT 29-APR-1994 (first entry)

XX Human anti-HBs heavy chain.

XX Antibody; Ab; light; heavy; chain; hepatitis B; HB; surface antigen.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Peptide 1..9

FT Protein /label= sig\_peptide

FT /label= mat\_protein

XX WO9320205-A1.

XX 14-OCT-1993.

XX 30-MAR-1993; 93WO-UP000396.

XX 30-MAR-1992; 92JP-00074678.

XX (SUNR ) SUNTORY LTD.

XX Kurihara T, Matsukura S, Tsuruoka N, Arima K, Nishihara T;

XX WPI; 1993-336913/42.

XX N-PSDB; AAQ49944.

XX Human anti-hepatitis B surface antigen antibody gene - can be used to  
PT produce L and H chains of the antibody in large quantity.

XX Disclosure; Fig 6-8; 46pp; Japanese.

XX Polynucleotides encoding the L and H chains of human anti-HBs Ab are  
CC given in AAQ49943-Q49944. The Ab can be easily produced in large  
CC quantities for therapeutic use. (Updated on 25-MAR-2003 to correct PN  
CC field.)  
XX

XX Sequence 459 AA;

Query Match 100.0%; Score 1263; DB 2; Length 459;  
Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDRLMISRTPEVTCVVDVSHEDPEVKF 60

DB 228 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDRLMISRTPEVTCVVDVSHEDPEVKF 287

QY 61 NWYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

DB 288 NWYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 347

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180

DB 348 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 407

QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTOKSLSLSPGK 232

Db 408 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKLSLSLSPGK 459  
|||||  
RESULT 154  
ADR86700  
ID ADR86700 standard; protein; 459 AA.  
XX  
AC ADR86700;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Ephrin B2 extracellular domain B2EC-FC.  
XX  
KW cytostatic; antiinflammatory; antirheumatic; antipsoriatic;  
KW dermatological; ophthalmological; gene therapy; EphB4; Ephrin B2;  
KW pharmaceutical; cosmetic; diagnostic; Ephrin B2/EphB4 pathway; tumour;  
KW angiogenesis-associated disease; inflammatory disorder;  
KW chronic articular rheumatism; psoriasis; ocular angiogenic disease;  
KW scleroderma; human; ephrin B2; extracellular domain; B2EC-FC.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080425-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 12-MAR-2004; 2004WO-US007755.  
XX  
PR 12-MAR-2003; 2003US-0454300P.  
PR 12-MAR-2003; 2003US-0454432P.  
XX  
PA (VASG-) VASGENE THERAPEUTICS INC.  
XX  
PI Krasnoperov V, Zozulya S, Keretes N, Reddy R, Gill P;  
XX  
DR WPI; 2004-668883/65.  
XX  
PT New soluble polypeptides comprising an extracellular domain of EphB4 or  
PT Ephrin B2 protein for diagnosing or treating cancer or angiogenesis-  
PT associated diseases, such as inflammatory disorders, psoriasis or  
PT scleroderma.  
XX  
PS Example 1; Fig 5; 199pp; English.  
XX  
CC The invention describes an isolated soluble polypeptide comprising an  
CC amino acid sequence of an extracellular domain of an EphB4 or Ephrin B2  
CC protein. The EphB4 or Ephrin B2 polypeptide is a monomer, the EphB4  
CC polypeptide binds specifically to the Ephrin B2 polypeptide, and the  
CC Ephrin B2 polypeptide binds specifically to the EphB4 polypeptide. Also  
CC described are: an antagonist antibody that binds to an extracellular  
CC domain of the EphB4 or Ephrin B2 protein and inhibits an activity of the  
CC EphB4 or Ephrin B2; a pharmaceutical or cosmetic composition, or a  
CC diagnostic kit, comprising the above soluble polypeptide or antagonist  
CC antibody, and a pharmaceutical carrier; methods of inhibiting  
CC angiogenesis or inhibiting signaling through Ephrin B2/EphB4 pathway in a  
CC cell; a method of reducing the growth rate of a tumour; methods for  
CC treating a patient suffering from a cancer or an angiogenesis-associated  
CC disease; and a method for identifying a tumor that is suitable for  
CC treatment with an EphrinB2 or EphB4 antagonist. The polypeptide or  
CC antibody is useful for manufacturing a medicament for the treatment of  
CC cancer or an angiogenesis-associated disease. The composition and methods  
CC are useful for diagnosing or treating cancer or angiogenesis-associated  
CC diseases, such as inflammatory disorders, chronic articular rheumatism,  
CC psoriasis, ocular angiogenic diseases or scleroderma. This is the amino  
CC acid sequence of human ephrin B2 extracellular domain B2EC-FC.  
XX  
SQ Sequence 459 AA;

Query Match 100.0%; Score 1263; DB 8; Length 459;  
Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPPKPOTLMISRTPEVTCVVVDVSHEDPEVKF 60  
|||  
Db 228 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPPKPOTLMISRTPEVTCVVVDVSHEDPEVKF 287  
|||  
QY 61 NWYDGVVHNAKTPREBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
|||  
Db 288 NWYDGVVHNAKTPREBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 347  
|||  
QY 121 ISKAGQPREQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVWESNGQPENNYKTPP 180  
|||  
Db 348 ISKAGQPREQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVWESNGQPENNYKTPP 407  
|||  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKLSLSLSPGK 232  
|||  
Db 408 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKLSLSLSPGK 459  
|||  
RESULT 155  
ADR82647  
ID ADR82647 standard; protein; 459 AA.  
XX  
AC ADR82647;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human B2EC-FC protein.  
XX  
KW human; EphB4; EphrinB2; cancer; angiogenesis-associated disease;  
KW inflammatory disorder; chronic articular rheumatism; psoriasis;  
KW ocular angiogenic disease; scleroderma; cytostatic; antiinflammatory;  
KW antirheumatic; antipsoriatic; dermatological; ophthalmological;  
KW angiogenesis inhibitor.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080418-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 12-MAR-2004; 2004WO-US007491.  
XX  
PR 12-MAR-2003; 2003US-0454300P.  
PR 12-MAR-2003; 2003US-0454432P.  
XX  
PA (VASG-) VASGENE THERAPEUTICS INC.  
XX  
PI Reddy R, Gill P;  
XX  
DR WPI; 2004-668879/65.  
XX  
PT New isolated nucleic acid compounds that hybridize to EphB4 or EphrinB2  
PT transcripts or decrease the expression of EphB4 or EphrinB2 in cells,  
PT useful for diagnosing or treating cancer or angiogenesis-associated  
PT diseases.  
XX  
PS Disclosure; Fig 5; 206pp; English.  
XX  
CC The invention relates to an isolated nucleic acid compound comprising at  
CC least a portion that hybridizes to an EphB4 or EphrinB2 transcript under  
CC physiological conditions and decreases the expression of EphB4 or  
CC EphrinB2 in a cell. The nucleic acid is useful for manufacturing a  
CC medicament for the treatment of cancer or angiogenesis-associated  
CC diseases. The composition and methods are useful for diagnosing or  
CC treating cancer or angiogenesis-associated diseases, such as inflammatory  
CC disorders, chronic articular rheumatism, psoriasis, ocular angiogenic  
CC diseases or scleroderma. The present sequence represents the amino acid  
CC sequence of human B2EC-FC protein.  
XX  
SQ Sequence 459 AA;

Query Match 100.0%; Score 1263; DB 8; Length 459;  
Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 228 EPKSCDKTHTCCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 287  
 QY 61 NTWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 120  
 DB 288 NTWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 347  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 348 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 407  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCVSMHEALHNHYTQKSLSLSPGK 232  
 DB 408 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCVSMHEALHNHYTQKSLSLSPGK 459  
 RESULT 156  
 AAY69890  
 ID AAY69890 standard; protein; 460 AA.  
 XX  
 AC AAY69890;  
 XX  
 DT 24-MAY-2000 (first entry)  
 XX  
 DE Human NR8alpha/IgG-Fc fusion protein.  
 XX  
 KW Haemopoietin receptor family; NR8; antibody; diagnosis;  
 KW blood formation disorder; fusion protein; immunoglobulin.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN W09967290-A1.  
 XX  
 XX 29-DEC-1999.  
 XX  
 XX 23-JUN-1999; 99WO-JP003351.  
 XX  
 XX 24-JUN-1998; 98JP-00214720.  
 PR 19-OCT-1998; 98JP-00297409.  
 XX  
 XX (CHUS ) CHUGAI RES INST MOLECULAR MEDICINE INC.  
 PA  
 XX  
 PI Nomura H, Maeda M;  
 XX  
 XX WPI; 2000-116933/10.  
 DR N-PSDB; AAZ59248.  
 XX  
 XX Hemopoietin receptor protein family NR8 used for diagnosis of blood  
 PT formation disorders.  
 PT  
 XX  
 PS Example 6; Page 132-136; 176pp; Japanese.  
 CC  
 CC This sequence represents a fusion protein comprising the haemopoietin  
 CC receptor protein family NR8alpha gene (AAY69890) fused to a human  
 CC immunoglobulin IgG1-Fc. Antibodies to the NR8 family proteins are used  
 CC for the diagnosis of blood formation disorders. Compounds identified as  
 CC binding to the proteins are used for the treatment of such disorders  
 XX.  
 XX  
 SQ Sequence 460 AA;  
 Query Match 100.0%; Score 1263; DB 3; Length 460;  
 Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 229 EPKSCDKTHTCCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 288  
 QY 61 NTWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 120

DB 289 NTWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 348  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 349 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 408  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCVSMHEALHNHYTQKSLSLSPGK 232  
 DB 409 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCVSMHEALHNHYTQKSLSLSPGK 460  
 RESULT 157  
 AAR42162  
 ID AAR42162 standard; protein; 461 AA.  
 XX  
 AC AAR42162;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 27-APR-1994 (first entry)  
 XX  
 DE Anti-HIV-1 recombinant antibody 447-52D heavy chain.  
 XX  
 KW Human Immunodeficiency Virus; antigen; ELISA; recombinant antibody;  
 KW HIV-neutralising monoclonal antibody; immunoglobulin; AIDS;  
 KW acquired immune deficiency syndrome; chimeric antibody;  
 KW surface glycoprotein gp120; V3 loop.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W09319785-A1.  
 XX  
 XX 14-OCT-1993.  
 XX  
 XX 23-MAR-1993; 93WO-US002629.  
 XX  
 XX 01-APR-1992; 92US-00861701.  
 PR  
 XX (MERI ) MERCK & CO INC.  
 XX  
 XX Emimi EA, Conley AJ, Mark GE, Johnson LS, Pfarr DS;  
 XX  
 XX WPI; 1993-336600/42.  
 DR N-PSDB; AAQ49834.  
 XX  
 XX New recombinant human antibody - with HIV neutralising activity against  
 PT at least two isolates, useful for preventing or treating infection in  
 PT diagnosis, etc.  
 PT  
 XX  
 PS Example 9; Fig 2A; 154pp; English.  
 XX  
 XX BRV-transformed cell lines and mouse-human heterohybridomas producing  
 CC human MAbs specific for the gp120 V3 loop of HIV-1 MN isolate were  
 CC obtained. MAb 447-52D was found to recognise the tetrapeptide motif GPGR,  
 CC i.e. the Principal Neutralising Determinant common to the V3 loop of  
 CC different HIV isolates. A recombinant Ab was produced in which the H  
 CC chain V region was derived from 447-52D and to which a signal sequence  
 CC and a H chain intronic sequence are appended, fused to a fragment contg.  
 CC a short intronic segment of the human gamma 1 C region and the human  
 CC gamma 1 encoding domain in its genomic form. (Updated on 25-MAR-2003 to  
 CC correct PN field.)  
 XX  
 SQ Sequence 461 AA;  
 Query Match 100.0%; Score 1263; DB 2; Length 461;  
 Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 230 EPKSCDKTHTCCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 289  
 QY 61 NTWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 120

Db 290 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 349

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 180

Db 350 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 409

QY 181 PVLDSDGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKLSLSLSPGK 232

Db 410 PVLDSDGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKLSLSLSPGK 461

RESULT 158

AAU07745

ID AAU07745 standard; protein; 461 AA.

XX

AC AAU07745;

XX

DT 04-DEC-2001 (first entry)

XX

DE Humanised monoclonal antibody Hu266, heavy chain.

XX

XX Monoclonal antibody; Hu266; nontropic; neuroprotective; Abeta peptide;

KW Alzheimer's disease; Down's syndrome; cerebral amyloid angiopathy;

KW gene therapy.

XX

OS Mus sp.

OS Homo sapiens.

OS Synthetic.

XX

XX Key Location/Qualifiers

FH Peptide 1..19

FT /label= signal\_peptide

FT Protein 20..461

FT /label= Mature\_Hu266\_heavy\_chain

FT /note= "This sequence is specifically claimed in claim

FT 17"

XX

PN WC200162801-A2.

XX

PD 30-AUG-2001.

XX

XX 26-FEB-2001; 2001WO-US006191.

XX

XX 24-FEB-2000; 2000US-0184601P.

PR 08-DEC-2000; 2000US-0254465P.

PR 08-DEC-2000; 2000US-0254498P.

XX

XX (UNIW ) UNIV WASHINGTON.

PA (ELIL ) LILLY & CO ELI.

XX

XX Holtzman DM, Demattos R, Bales KR, Paul SM, Tsurushita N;

PI Vasquez M;

XX

XX WPI; 2001-550087/61.

DR

XX

XX New humanized antibody for the treatment of Alzheimer's comprises the

PT inhibition and reduction of the formation of amyloid plaques.

PT

XX

XX Example 13; Fig 5; 63pp; English.

PS

XX

XX The invention relates a humanised antibody that specifically binds an

CC epitope contained within positions 13-28 of amyloid beta peptide, Abeta.

CC The antibody is useful to inhibit and reduce the formation of amyloid

CC plaques or the effects of toxic soluble Abeta species in humans their

CC fragments are used for the manufacture of a medicament. This includes the

CC prolonged expression of recombinant sequences of them in human tissues

CC for the treatment of clinical/pre-clinical Alzheimer's disease, Down's

CC syndrome or pre clinical cerebral amyloid angiopathy. Specifically, the

CC antibody is used to sequester Abeta into plasma, brain or cerebrospinal

CC fluid to prevent/reverse accumulation of the Abeta peptide within the

CC brain thereby improving cognition. The present sequence is the heavy

CC chain of a humanised monoclonal antibody, Hu266, based on the mouse

CC antibody 266

XX Sequence 461 AA;

SQ

Query Match 100.0%; Score 1263; DB 4; Length 461;

Best Local Similarity 100.0%; Pred. NO. 3.4e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLRPPKPKDTLMISRTPEVTCVVVDVSHEDDEVKF 60

Db 230 EPKSCDKTHTCPPCPAPPELLGGPSVFLRPPKPKDTLMISRTPEVTCVVVDVSHEDDEVKF 289

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Db 290 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 349

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 180

Db 350 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 409

QY 181 PVLDSDGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKLSLSLSPGK 232

Db 410 PVLDSDGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKLSLSLSPGK 461

RESULT 159

ABR39844

ID ABR39844 standard; protein; 461 AA.

XX

AC ABR39844;

XX

DT 18-AUG-2003 (first entry)

XX

DE Hu266 N56T heavy chain.

XX

KW Amyloid-beta; Abeta; antibody 266; nontropic; neuroprotective; CDR;

KW immunostimulant.

XX

OS Homo sapiens.

XX

PN WO2003016466-A2.

XX

PD 27-FEB-2003.

XX

XX 14-AUG-2002; 2002WO-US021322.

XX

PR 17-AUG-2001; 2001US-0313224P.

XX

XX (ELIL ) LILLY & CO ELI.

XX

XX Jia AY, Tsurushita N, Vasquez MJ;

XX

XX WPI; 2003-278557/27.

DR

DR N-PSDB; ACC47228.

XX

XX New antibodies comprising a heavy chain and a light chain complementarity

PT determining regions from antibody 266, for treating and preventing

PT conditions associated with the A beta peptide, e.g. Alzheimer's disease

PT or Down syndrome.

XX

XX Disclosure; Fig 3; 82pp; English.

PS

XX The invention relates to an anti-Abeta (amyloid-beta peptide) antibody

CC 266. The antibodies are useful for treating and preventing conditions

CC associated with the Abeta peptide, such as Alzheimer's disease, Down

CC syndrome, and cerebral amyloid angiopathy; for diagnosing diseases in

CC humans; for determining whether a human subject will respond to treatment

CC using humanized antibodies against Abeta; for treating, preventing and

CC reversing cognitive decline in clinical or pre-clinical Alzheimer's

CC disease. Down's syndrome or cerebral amyloid angiopathy; for inhibiting

CC formation of amyloid plaques of the effects of toxic soluble Abeta

CC species in humans. Treatment of the patients with antibody will inhibit

CC or prevent cognitive decline typically associated with disease

CC progression and reverses it. The present sequence represents a humanised

CC anti-Abeta antibody 266 N56T heavy chain  
XX  
SQ Sequence 461 AA;

Query Match 100.0%; Score 1263; DB 6; Length 461;  
Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 230 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKF 289  
QY 61 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQLDNLNGKEYCKVSNKALPAPIETK 120  
DB 290 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQLDNLNGKEYCKVSNKALPAPIETK 349  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 350 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 409  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNYHTQKSLSPGK 232  
DB 410 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNYHTQKSLSPGK 461

RESULT 160

ABR39847  
ID ABR39847 standard; protein; 461 AA.  
XX  
AC ABR39847;  
XX  
DT 18-AUG-2003 (first entry)  
XX  
DE Hu266 N56S heavy chain.  
XX  
KW Amyloid-beta; Abeta; antibody 266; nootropic; neuroprotective; CDR;  
KW immunostimulant.  
XX  
OS Homo sapiens.  
XX  
PN WO2003016466-A2.  
XX  
PD 27-FEB-2003.  
XX  
PF 14-AUG-2002; 2002WO-US021322.  
XX  
PR 17-AUG-2001; 2001US-0313224P.  
XX  
PA (ELIL ) LILLY & CO ELI.  
XX  
PI Jia AY, Tsurushita N, Vasquez MJ;  
XX  
DR WPI; 2003-278557/27.  
DR N-PSDB; ACC47231.  
XX

XX New antibodies comprising a heavy chain and a light chain complementarity  
PT determining regions from antibody 266, for treating and preventing  
PT conditions associated with the A beta peptide, e.g. Alzheimer's disease  
PT or Down syndrome.  
XX  
PS Disclosure; Fig 6; 82pp; English.  
XX  
CC The invention relates to an anti-Abeta (amyloid-beta peptide) antibody  
CC 266. The antibodies are useful for treating and preventing conditions  
CC associated with the Abeta peptide, such as Alzheimer's disease, Down  
CC syndrome, and cerebral amyloid angiopathy; for diagnosing diseases in  
CC humans; for determining whether a human subject will respond to treatment  
CC using humanized antibodies against Abeta; for treating, preventing and  
CC reversing cognitive decline in clinical or pre-clinical Alzheimer's  
CC disease, Down's syndrome or cerebral amyloid angiopathy; for inhibiting  
CC formation of amyloid plaques of the effects of toxic soluble Abeta  
CC species in humans. Treatment of the patients with antibody will inhibit  
CC or prevent cognitive decline typically associated with disease

CC progression and reverses it. The present sequence represents a humanised  
CC anti-Abeta antibody 266 N56S heavy chain  
XX  
SQ Sequence 461 AA;  
Query Match 100.0%; Score 1263; DB 6; Length 461;  
Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 230 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKF 289  
QY 61 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQLDNLNGKEYCKVSNKALPAPIETK 120  
DB 290 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQLDNLNGKEYCKVSNKALPAPIETK 349  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 350 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 409  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNYHTQKSLSPGK 232  
DB 410 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNYHTQKSLSPGK 461

RESULT 161

ABR39843  
ID ABR39843 standard; protein; 461 AA.  
XX  
AC ABR39843;  
XX  
DT 18-AUG-2003 (first entry)  
XX  
DE Hu266 N56S heavy chain.  
XX  
KW Amyloid-beta; Abeta; antibody 266; nootropic; neuroprotective; CDR;  
KW immunostimulant.  
XX  
OS Homo sapiens.  
XX  
PN WO2003016466-A2.  
XX  
PD 27-FEB-2003.  
XX  
PF 14-AUG-2002; 2002WO-US021322.  
XX  
PR 17-AUG-2001; 2001US-0313224P.  
XX  
PA (ELIL ) LILLY & CO ELI.  
XX  
PI Jia AY, Tsurushita N, Vasquez MJ;  
XX  
DR WPI; 2003-278557/27.  
DR N-PSDB; ACC47227.  
XX

XX New antibodies comprising a heavy chain and a light chain complementarity  
PT determining regions from antibody 266, for treating and preventing  
PT conditions associated with the A beta peptide, e.g. Alzheimer's disease  
PT or Down syndrome.  
XX  
PS Disclosure; Fig 2; 82pp; English.  
XX  
CC The invention relates to an anti-Abeta (amyloid-beta peptide) antibody  
CC 266. The antibodies are useful for treating and preventing conditions  
CC associated with the Abeta peptide, such as Alzheimer's disease, Down  
CC syndrome, and cerebral amyloid angiopathy; for diagnosing diseases in  
CC humans; for determining whether a human subject will respond to treatment  
CC using humanized antibodies against Abeta; for treating, preventing and  
CC reversing cognitive decline in clinical or pre-clinical Alzheimer's  
CC disease, Down's syndrome or cerebral amyloid angiopathy; for inhibiting  
CC formation of amyloid plaques of the effects of toxic soluble Abeta  
CC species in humans. Treatment of the patients with antibody will inhibit

CC or prevent cognitive decline typically associated with disease  
 CC progression and reverses it. The present sequence represents a humanised  
 CC anti-Abeta antibody 266 N56S heavy chain  
 XX  
 SQ Sequence 461 AA;

Query Match 100.0%; Score 1263; DB 6; Length 461;  
 Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDDEVK 60  
 DB 230 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDDEVK 289  
 QY 61 NWTVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 290 NWTVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 349  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 350 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 409  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 410 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 461

RESULT 162  
 ABR39848  
 ID ABR39848 standard; protein; 461 AA.  
 AC ABR39848;  
 XX  
 DT 18-AUG-2003 (first entry)  
 XX  
 DE Hu266 N56T heavy chain.  
 XX  
 KW Amyloid-beta; Abeta; antibody 266; neurotropic; neuroprotective; CDR;  
 KW immunostimulant.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003016466-A2.  
 XX  
 PD 27-FEB-2003.  
 XX  
 PF 14-AUG-2002; 2002WO-US021322.  
 XX  
 PR 17-AUG-2001; 2001US-0313224P.  
 XX  
 PA (ELIL ) LILLY & CO ELI.  
 XX  
 PI Jia AY, Teurushita N, Vasquez MJ;  
 XX  
 DR WPI; 2003-278557/27.  
 DR N-PSDB; ACC47232.  
 XX  
 PT New antibodies comprising a heavy chain and a light chain complementarity  
 PT determining regions from antibody 266, for treating and preventing  
 PT conditions associated with the A beta peptide, e.g. Alzheimer's disease  
 PT or Down syndrome.  
 XX  
 PS Disclosure; Fig 7; 82pp; English.  
 XX  
 CC The invention relates to an anti-Abeta (amyloid-beta peptide) antibody  
 CC 266. The antibodies are useful for treating and preventing conditions  
 CC associated with the Abeta peptide, such as Alzheimer's disease, Down  
 CC syndrome, and cerebral amyloid angiopathy; for diagnosing diseases in  
 CC humans; for determining whether a human subject will respond to treatment  
 CC using humanized antibodies against Abeta; for treating, preventing and  
 CC reversing cognitive decline in clinical or pre-clinical Alzheimer's  
 CC disease, Down's syndrome or cerebral amyloid angiopathy; for inhibiting  
 CC formation of amyloid plaques of the effects of toxic soluble Abeta

CC species in humans. Treatment of the patients with antibody will inhibit  
 CC or prevent cognitive decline typically associated with disease  
 CC progression and reverses it. The present sequence represents a humanised  
 CC anti-Abeta antibody 266 N56T heavy chain  
 XX  
 SQ Sequence 461 AA;

Query Match 100.0%; Score 1263; DB 6; Length 461;  
 Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDDEVK 60  
 DB 230 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDDEVK 289  
 QY 61 NWTVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 290 NWTVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 349  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 350 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 409  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 410 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 461

RESULT 163  
 ABR39025  
 ID ABR39025 standard; protein; 461 AA.  
 AC ABR39025;  
 XX  
 DT 17-OCT-2003 (first entry)  
 XX  
 DE Fusion protein of the extracellular domain of mouse SJ2368 & Fc fragment.  
 XX  
 KW Class II cytokine receptor; SJ2368; autoimmunity; inflammatory; cytostatic;  
 KW allergic disease; septicaemia; tumour; immunosuppressive; antiallergic;  
 KW antiinflammatory; mouse; human.  
 XX  
 OS Mus sp.  
 OS Unidentified.  
 XX  
 PN WO2003031620-A1.  
 XX  
 PD 17-APR-2003.  
 XX  
 PF 02-OCT-2002; 2002WO-JP010280.  
 XX  
 PR 02-OCT-2001; 2001JP-00306851.  
 PR 12-JUL-2002; 2002JP-00204385.  
 XX  
 PA (MOCH ) MOCHIDA PHARM CO LTD.  
 PA (KAZU-) KAZUSA DNA RES INST.  
 XX  
 PI Ohara O, Nagase T, Katou Y, Takahashi T, Ohkawa K, Shirakawa K;  
 XX  
 DR WPI; 2003-381719/36.  
 XX  
 PT Class II cytokine receptor SJ2368 and regulators of its activity and  
 PT expression for treatment and diagnosis of autoimmune, inflammatory and  
 PT allergic diseases and tumours.  
 XX  
 PS Example 8; Page 164-167; 188pp; Japanese.  
 XX  
 CC This invention relates to the class II cytokine receptor gene SJ2368 and  
 CC the encoded protein, derived from either a mouse or human origin.  
 CC Agonists or antagonists of the cytokine receptor SJ2368 can be used for  
 CC the treatment and diagnosis of autoimmune, inflammatory and allergic  
 CC diseases, as well as for treating the effects of septicaemia and for  
 CC tumours. Accordingly, they can be described as having immunosuppressive,

CC antiinflammatory, antiallergic and/ or cytostatic activity. This  
 CC polypeptide sequence is related to the class II cytokine receptor SU2368  
 CC of the invention  
 XX  
 SQ Sequence 461 AA;

Query Match 100.0%; Score 1263; DB 6; Length 461;  
 Best Local Similarity 100.0%; Pred. No. 3.4e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 230 EPKSCDKHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 289

QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 290 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 349

QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
 DB 350 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 409

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232  
 DB 410 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 461

RESULT 164  
 AAY97592  
 ID AAY97592 standard; protein; 462 AA.  
 XX  
 AC AAY97592;  
 XX  
 DT 05-APR-2001 (first entry)  
 XX  
 DE Flt1 receptor fusion protein Mut3:Flt1(2-3)-Fc.  
 XX  
 KW Flt1 receptor; fusion protein; chimeric protein; pharmacokinetic;  
 KW plasma leakage; vascular permeability; IgG Fc region.  
 XX  
 OS Unidentified.  
 XX  
 XX WO200075319-A1.  
 PN  
 XX 14-DEC-2000.  
 PD  
 XX 23-MAY-2000; 2000WO-US014142.  
 PF  
 XX 08-JUN-1999; 99US-0138133P.  
 PR  
 XX (REG- ) REGENERON PHARM INC.  
 PA  
 XX Papadopoulos NJ, Davis S, Yancopoulos GD;  
 PI  
 XX WPI; 2001-071076/08.  
 DR  
 XX N-PSDB; AAA91072.  
 DR  
 XX Nucleic acid molecule encoding mammalian phospholipid transfer protein,  
 PT and its fragments, useful for diagnosis, evaluation, and treatment of  
 PT diseases associated with the gene expression and for producing model  
 PT systems.  
 XX  
 XX Claim 49; Fig 15; 159pp; English.  
 PS  
 XX This sequence represents a fusion protein of the invention between the  
 CC Flt1 receptor and the Fc region of IgG. The specification relates to  
 CC modified chimeric polypeptides with improved pharmacokinetics. The  
 CC modified chimeric polypeptides are preferably Flt1 receptor polypeptides  
 CC that have been modified to improve their pharmacokinetic profile. The  
 CC polypeptides can be used to decrease or inhibit plasma leakage and/or  
 CC vascular permeability in a mammal  
 XX  
 SQ Sequence 462 AA;

Query Match 100.0%; Score 1263; DB 4; Length 462;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 231 EPKSCDKHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 290

QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 291 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 350

QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
 DB 351 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 410

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232  
 DB 411 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 462

RESULT 165  
 ABP52445  
 ID ABP52445 standard; protein; 462 AA.  
 XX  
 AC ABP52445;  
 XX  
 DT 23-OCT-2002 (first entry)  
 XX  
 DE Mutation 3 Flt1(2-3)-Fc protein sequence.  
 XX  
 KW Human; Flt1; vascular endothelial growth factor; VEGF; VEGF antagonist;  
 KW psoriasis; wound healing; Flt1 receptor; antipsoriatic; antiinflammatory;  
 KW vulnary; antiasthmatic; antirheumatic; antiarthritic; nephrotropic;  
 KW ophthalmological; vascular permeability; oedema; inflammation; asthma;  
 KW brain oedema; inflammatory disorder; rheumatoid arthritis; burn;  
 KW kidney disease; eye disorder; age-related macular degeneration;  
 KW diabetic retinopathy.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 XX WO200260489-A1.  
 PN  
 XX 08-AUG-2002.  
 PD  
 XX 28-JAN-2002; 2002WO-US002466.  
 PF  
 XX 31-JAN-2001; 2001US-00773877.  
 PR  
 XX (REG- ) REGENERON PHARM INC.  
 PA  
 XX Xia Y, Rudge JS, Yancopoulos GD;  
 PI  
 XX WPI; 2002-608488/65.  
 DR  
 XX N-PSDB; ABQ74606.  
 DR  
 XX Treating psoriasis and enhancing wound healing in humans comprises the  
 PT administration of a vascular endothelial cell growth factor (VEGF)  
 PT antagonist.  
 XX  
 XX Example 13; Fig 15A-C; 179pp; English.  
 PS  
 XX The present invention describes a method for treating psoriasis and  
 CC enhancing wound healing in a mammal or a human. The method comprises  
 CC administering a vascular endothelial cell growth factor (VEGF) antagonist  
 CC to the mammal or human. A VEGF antagonist has antipsoriatic,  
 CC antiinflammatory, vulnary, antiasthmatic, antirheumatic, antiarthritic,  
 CC nephrotropic and ophthalmological activities. The method can be used in  
 CC treating psoriasis and enhancing wound healing in humans by administering  
 CC VEGF antagonist. The method is also useful in treating clinical  
 CC conditions characterised by vascular permeability, oedema or

CC inflammation, such as brain oedema associated with injury, oedema  
CC associated with inflammatory disorders (e.g. rheumatoid arthritis),  
CC asthma, burns, kidney diseases, or eye disorders such as age-related  
CC macular degeneration and diabetic retinopathy. The method may also be  
CC used in making the polypeptide to decrease or inhibit plasma leakage and  
CC or vascular permeability. The present sequence represents Mut3:Flt1(2-3)  
CC -Fc which is used in an example from the present invention  
XX  
SQ Sequence 462 AA;  
  
Query Match 100.0%; Score 1263; DB 5; Length 462;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKCDKTHTCPPCPAPPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 231 EPKCDKTHTCPPCPAPPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 290  
  
QY 61 NWYDGVVEVHNAKTPREEQYNSTYRVSVLTVLDHQLWLNKGYKCKVSNKALPAPIEKT 120  
DB 291 NWYDGVVEVHNAKTPREEQYNSTYRVSVLTVLDHQLWLNKGYKCKVSNKALPAPIEKT 350  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 351 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 410  
  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232  
DB 411 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 462  
  
RESULT 166  
ABU39027  
ID ABU39027 standard; protein; 462 AA.  
XX  
AC ABU39027;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Fusion protein of the extracellular domain of human SJ2368 & Fc fragment.  
XX  
KW Class II cytokine receptor; SJ2368; autoimmune; inflammatory; cytostatic;  
KW allergic disease; septicemia; tumour; immunosuppressive; antiallergic;  
KW antiinflammatory; mouse; human.  
XX  
OS Homo sapiens.  
OS Unidentified.  
XX  
PN WO2003031620-A1.  
XX  
PD 17-APR-2003.  
XX  
PF 02-OCT-2002; 2002WO-JP010280.  
XX  
PR 02-OCT-2001; 2001JP-00306851.  
PR 12-JUL-2002; 2002JP-00204385.  
XX  
PA (MOCH ) MOCHIDA PHARM CO LTD.  
PA (KAZU-) KAZUSA DNA RES INST.  
XX  
XX Ohara O, Nagase T, Katou Y, Takahashi T, Ohkawa K, Shirakawa K;  
XX WPI; 2003-381719/36.  
XX  
XX Class II cytokine receptor SJ2368 and regulators of its activity and  
XX expression for treatment and diagnosis of autoimmune, inflammatory and  
XX allergic diseases and tumours.  
XX  
XX Example 4; Page 170-172; 188pp; Japanese.  
XX  
XX This invention relates to the class II cytokine receptor gene SJ2368 and  
XX the encoded protein, derived from either a mouse or human origin.  
CC  
CC Agonists or antagonists of the cytokine receptor SJ2368 can be used for

CC the treatment and diagnosis of autoimmune, inflammatory and allergic  
CC diseases, as well as for treating the effects of septicemia and for  
CC tumours. Accordingly, they can be described as having immunosuppressive,  
CC antiinflammatory, antiallergic and/ or cytostatic activity. This  
CC polypeptide sequence is related to the class II cytokine receptor SJ2368  
CC of the invention  
XX  
SQ Sequence 462 AA;  
  
Query Match 100.0%; Score 1263; DB 6; Length 462;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKCDKTHTCPPCPAPPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 231 EPKCDKTHTCPPCPAPPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 290  
  
QY 61 NWYDGVVEVHNAKTPREEQYNSTYRVSVLTVLDHQLWLNKGYKCKVSNKALPAPIEKT 120  
DB 291 NWYDGVVEVHNAKTPREEQYNSTYRVSVLTVLDHQLWLNKGYKCKVSNKALPAPIEKT 350  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 351 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 410  
  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232  
DB 411 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 462  
  
RESULT 167  
ADM97598  
ID ADM97598 standard; protein; 462 AA.  
XX  
AC ADM97598;  
XX  
DT 01-JUL-2004 (first entry)  
XX  
DE Mouse monoclonal antibody production method related fusion protein.  
XX  
KW immunostimulant; antibody production; immune response; disease treatment;  
KW human.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO2004031382-A1.  
XX  
PD 15-APR-2004.  
XX  
PF 02-OCT-2003; 2003WO-JP012659.  
XX  
PR 02-OCT-2002; 2002JP-00290442.  
XX  
PA (MOCH ) MOCHIDA PHARM CO LTD.  
XX  
PI Shirakawa K;  
XX  
XX WPI; 2004-330184/30.  
XX  
XX Constructing a specific antigen-reactive monoclonal antibody for inducing  
XX an immune response e.g. in disease treatment, comprises using hybridoma  
XX cells obtainable from mouse lymph-node cells.  
XX  
XX Disclosure; Page 54-55; 60pp; Japanese.  
XX  
XX The present invention relates to a method of producing a mouse monoclonal  
XX antibody, which comprises mixing an antigen with an oligonucleotide,  
XX priming a mouse by administering the mixture, separating a lymph node  
XX from the mouse and fusing cells originated in the lymph node with myeloma  
XX cells to form hybridomas, and collecting the obtained hybridomas and  
XX harvesting an antibody. The thus constructed antibody is useful for  
XX inducing a specific immune response e.g. in disease treatment. The

CC present sequence is a fusion protein of human SJ2368 extracellular domain  
 CC and FC shown in the exemplification of the invention.

XX Query Match 100.0%; Score 1263; DB 8; Length 462;  
 XX Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
 XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
 Db 231 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 290

Qy 61 NWTVDGVEVHNATKPREEQVNSTYRVSVLTVLHQDLNKGKEYKCKVSNKALPAPIEKT 120  
 Db 291 NWTVDGVEVHNATKPREEQVNSTYRVSVLTVLHQDLNKGKEYKCKVSNKALPAPIEKT 350

Qy 121 ISKAKGQPREPOVYITLPSSDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 180  
 Db 351 ISKAKGQPREPOVYITLPSSDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 410

Qy 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 232  
 Db 411 PVLDSGSPFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 462

RESULT 168

ADM72025  
 ID ADM72025 standard; protein; 463 AA.

XX AC ADM72025;

XX DT 03-JUN-2004 (first entry)

XX Chimeric mouse-human antibody M3C11 heavy chain.

XX GPC3; glypican 3; anti-GPC3 antibody; cell disruption; anti-cancer;  
 XX cytostatic; M3C11.

XX Mus sp.

XX Homo sapiens.

XX Chimeric.

XX WO2004022739-A1.

XX 18-MAR-2004.

XX 04-SEP-2003; 2003WO-JP011318.

XX 04-SEP-2002; 2002WO-JP008999.

XX (CHUS) CHUGAI SEIYAKU KK.

XX Aburatani H, Midorikawa Y, Nakano K, Ohizumi I, Ito Y, Tokita S;

XX WPI; 2004-269573/25.

XX N-PSDB; ADM72024.

XX Antibody against the N terminus of glypican 3 (GPC3) causes cell

XX disruption and is useful as an anticancer agent.

XX Example 4; SEQ ID NO 10; 122pp; Japanese.

XX The invention relates to an antibody against the N terminus of glypican 3

XX (GPC3). The antibody can be used for causing cell disruption and can be

XX used as an anti-cancer agent. The present sequence represents a chimeric

XX mouse-human antibody M3C11 heavy chain.

XX Sequence 463 AA;

XX Query Match 100.0%; Score 1263; DB 8; Length 463;

XX Best Local Similarity 100.0%; Pred. No. 3.5e-91;

XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
 Db 232 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 291

Qy 61 NWTVDGVEVHNATKPREEQVNSTYRVSVLTVLHQDLNKGKEYKCKVSNKALPAPIEKT 120  
 Db 292 NWTVDGVEVHNATKPREEQVNSTYRVSVLTVLHQDLNKGKEYKCKVSNKALPAPIEKT 351

Qy 121 ISKAKGQPREPOVYITLPSSDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 180  
 Db 352 ISKAKGQPREPOVYITLPSSDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 411

Qy 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 232  
 Db 412 PVLDSGSPFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTQKSLSLSPGK 463

RESULT 169

AAB72228  
 ID AAB72228 standard; protein; 465 AA.

XX AC AAB72228;

XX DT 10-MAY-2001 (first entry)

XX Humanised 323/A3 (IgG1) antibody heavy chain amino acid sequence.

XX Anti-Ep-CAM antibody; cyclic adenosine monophosphate; cell synthesis;

XX chemotherapeutic agent; cytostatic; anti-cancer therapy; cancer;

XX heavy chain.

XX Mus sp.

XX Homo sapiens.

XX WO200107082-A1.

XX 01-FEB-2001.

XX 23-JUL-1999; 99WO-EP005271.

XX 23-JUL-1999; 99WO-EP005271.

XX (GLAX) GLAXO GROUP LTD.

XX Knick VC, Stimmel JB, Thurmond LM;

XX WPI; 2001-182729/18.

XX N-PSDB; AAF63374.

XX Combination for treating cancer (e.g. breast, gastric or prostate

XX cancers), or in the manufacture of a medicament for anti-cancer therapy,

XX comprises an anti-Ep-cyclic adenosine monophosphate antibody with a

XX chemotherapeutic agent.

XX Disclosure; Fig 16; 103pp; English.

XX This invention relates to a combination of an anti-Ep-CAM (cyclic

XX adenosine monophosphate) antibody with a chemotherapeutic agent, that is

XX capable of arresting Ep-CAM antigen expressing cells in the synthesis (S)

XX phase or the second growth phase (M) of cell enlargement (G2)/DNA

XX replication. The antibody exhibits cytostatic activity and is useful in

XX the manufacture of a medicament for use in anti-cancer therapy.

XX characterised in that a chemotherapeutic agent, which is capable of

XX arresting Ep-CAM antigen expressing cells in S or in G2/M, is co-

XX administered to a patient with an anti-Ep-CAM antibody. The combination

XX is useful for treating cancer, particularly colorectal cancer, breast

XX cancer, gastric cancer, prostate cancer or non-small-cell lung cancer.

XX The present sequence represents the heavy chain of anti-Ep-CAM antibody

XX known as humanised 323/A3 (IgG1) which can be used in the combination of

XX the invention

XX Sequence 465 AA;

XX SQ

Query Match 100.0%; Score 1263; DB 4; Length 465;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCCPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 234 EPKSCDKTHTCCPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

QY 61 NMYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 294 NMYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

QY 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
DB 354 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 414 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 465

RESULT 170  
ADL23152  
ID ADL23152 standard; protein; 465 AA.  
XX AC ADL23152;  
XX DT 20-MAY-2004 (first entry)  
XX DE Mouse/human ING-1 antibody heavy chain, low/medium risk engineered.  
XX KW Human; mouse; mutin; bactericidal/permeability-increasing protein; BPI;  
XX KW Ep-CAM; CAB2.1; recombinant polypeptide production; ING-1; antibody;  
XX KW anti-CD18 antibody; cosmetic product; mutant.  
XX OS Mus sp.  
XX OS Homo sapiens.  
XX OS Chimeric.  
XX OS Synthetic.  
XX PN US2003203447-A1.  
XX PD 30-OCT-2003.  
XX PF 31-MAR-2003; 2003US-00404724.  
XX PR 29-MAR-2002; 2002US-0368530P.  
XX PA (HORWITZ) HORWITZ A H.  
XX PI Horwitz AH;  
XX DR WPI; 2003-875646/81.  
XX DR N-PSDB; ADL23151.  
XX PT Producing recombinant polypeptide, useful for treating or diagnosing  
XX PT comprising culturing cells transformed or transfected with a vector  
XX PT comprising multiple copies of a transcription unit separated by a  
XX PT selective marker gene.  
XX PS Example 6; SEQ ID NO 25; 133pp; English.  
XX CC The invention relates to producing a recombinant polypeptide comprising  
XX CC culturing cells, which have been transformed or transfected with a  
XX CC vector, or its segment comprising multiple copies of a transcription unit  
XX CC separated by at least one selective marker gene, where the transcription  
XX CC unit encodes a polypeptide under selective conditions. Also included are  
XX CC a vector or segment comprising multiple copies of a transcription unit  
XX CC separated by at least one selective marker gene where the transcription  
XX CC unit encodes a polypeptide, a host cell comprising an expression vector  
XX CC or segment and a stable cell line comprising an expression vector or  
XX CC segment. Each transcription unit is under the control of its own promoter

CC and 3' untranslated region, where the promoter is an SV40, HSV, bovine  
CC growth hormone, thymidine kinase, MPSV, mouse beta globin, human BPI, MSV  
CC -LTR, RSV, MMTV-LTR, CMV, MLV, Chinese hamster elongation factor or mouse  
CC Abelson LTR promoter. The expression vector further comprises multiple  
CC enhancers. The transcription unit also encodes two different subunits of  
CC a multimeric protein, an immunoglobulin light and heavy chain  
CC polypeptides or at least the variable regions of the immunoglobulin light  
CC and heavy chain polypeptides. It further encodes a BPI protein  
CC (bactericidal/permeability-increasing protein) product. The protein  
CC product BPI protein fragment, BPI analogue, BPI variant or BPI-derived  
CC peptide. The transcription unit encodes an rBPI21 and is under the  
CC control of an hCMV promoter and mouse light chain 3' untranslated region,  
CC where the vector further comprises 0, 1 or 2 copies of a human heavy  
CC chain enhancer and either a gpt or neo gene. Other genes suitable for  
CC expression using the method of the invention are Ep-CAM and CAB2.1 (both  
CC not defined). The immunoglobulin may be the ING-1 chimeric mouse/human  
CC antibody for humanised versions or proline substitution mutants or an  
CC anti-CD18 antibody. The method is useful for producing recombinant  
CC polypeptide. Recombinant polypeptide compositions are useful in  
CC therapies, in diagnostic procedures or as tools in preventive medicine.  
CC Recombinant polypeptides are also found in a wide array of life. Complex  
CC and cosmetic products, used to increase the quality of life. Complex  
CC polypeptide products are also routinely used in research laboratories  
CC both as end products of analyses and as agents in assays for the study or  
CC preparation of other molecules. Advantages of the present invention  
CC includes increased recombinant polypeptide production, increased  
CC production efficiency, greater control and/or regulation over the  
CC quantities of the polypeptide expressed, increased stability of cell  
CC lines, and/or decreased costs for materials, reagents and/or other  
CC resources. The present sequence represents a mutated (humanised or  
CC proline mutant) light or heavy chain from an antibody gene suitable for  
CC inclusion in the transcription unit of the invention.

XX SQ Sequence 465 AA;

Query Match 100.0%; Score 1263; DB 7; Length 465;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCCPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 234 EPKSCDKTHTCCPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

QY 61 NMYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 294 NMYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

QY 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
DB 354 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 414 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 465

RESULT 171  
ADL23135  
ID ADL23135 standard; protein; 465 AA.  
XX AC ADL23135;  
XX DT 20-MAY-2004 (first entry)  
XX DE Mouse/human ING-1 chimeric antibody heavy chain.  
XX KW Human; mouse; bactericidal/permeability-increasing protein; BPI; Ep-CAM;  
XX KW CAB2.1; recombinant polypeptide production; ING-1; antibody;  
XX KW anti-CD18 antibody; cosmetic product.  
XX OS Mus sp.  
XX OS Homo sapiens.  
XX OS Chimeric.

XX PN US2003203447-A1.  
XX XX 30-OCT-2003.  
XX PF 31-MAR-2003; 2003US-00404724.  
XX PR 29-MAR-2002; 2002US-0368530P.  
XX PA (HORW/) HORWITZ A H.  
XX PI Horwitz AH;  
XX XX WPI; 2003-875646/81.  
DR N-PSDB; ADL231134.  
XX XX  
PT Producing recombinant polypeptide, useful for treating or diagnosing  
PT comprises culturing cells transformed or transfected with a vector  
PT comprising multiple copies of a transcription unit separated by a  
PT selective marker gene.  
XX XX  
PS Example 6; SEQ ID NO 8; 133pp; English.  
XX XX  
CC The invention relates to producing a recombinant polypeptide comprising  
CC culturing cells, which have been transformed or transfected with a  
CC vector, or its segment comprising multiple copies of a transcription unit  
CC separated by at least one selective marker gene, where the transcription  
CC unit encodes a polypeptide under selective conditions. Also included are  
CC a vector or segment comprising multiple copies of a transcription unit  
CC separated by at least one selective marker gene where the transcription  
CC unit encodes a polypeptide, a host cell comprising an expression vector  
CC or segment and a stable cell line comprising an expression vector or  
CC segment. Each transcription unit is under the control of its own promoter  
CC and 3' untranslated region, where the promoter is an SV40, HSV, bovine  
CC growth hormone, thymidine kinase, MPSV, mouse beta globin, human EF1, MSV  
CC -LTR, RSV, MMTV-LTR, CMV, MLV, Chinese hamster elongation factor or mouse  
CC Abelson LTR promoter. The expression vector further comprises multiple  
CC enhancers. The transcription unit also encodes two different subunits of  
CC a multimeric protein, an immunoglobulin light and heavy chain  
CC polypeptides or at least the variable regions of the immunoglobulin light  
CC and heavy chain polypeptides. It further encodes a BPI protein  
CC (bactericidal/permeability-increasing protein) product. The protein  
CC product BPI protein fragment, BPI analogue, BPI variant or BPI-derived  
CC peptide. The transcription unit encodes an RPI21 and is under the  
CC control of an hCMV promoter and mouse light chain 3' untranslated region,  
CC where the vector further comprises 0, 1 or 2 copies of a human heavy  
CC chain enhancer and either a gpt or neo gene. Other genes suitable for  
CC expression using the method of the invention are Ep-CAM and CAB2.1 (both  
CC not defined). The immunoglobulin may be the ING-1 chimaeric mouse/human  
CC antibody (or humanised versions or proline substitution mutants) or an  
CC anti-CD18 antibody. The method is useful for producing recombinant  
CC polypeptide. Recombinant polypeptide compositions are useful in  
CC therapies, in diagnostic procedures or as tools in preventive medicine.  
CC Recombinant polypeptides are also found in a wide array of both health  
CC and cosmetic products, used to increase the quality of life. Complex  
CC polypeptide products are also routinely used in research laboratories  
CC both as end products of analyses and as agents in assays for the study or  
CC preparation of other molecules. Advantages of the present invention  
CC includes increased recombinant polypeptide production, increased  
CC production efficiency, greater control and/or regulation over the  
CC qualities of the polypeptide expressed, increased stability of cell  
CC lines, and/or decreased costs for materials, reagents and/or other  
CC resources. The present sequence represents a light or heavy chain from a  
CC antibody gene suitable for inclusion in the transcription unit of the  
CC invention.  
XX XX  
SQ Sequence 465 AA;  
Query Match 100.0%; Score 1263; DB 7; Length 465;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 233; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKHTCPCPAPPELLGSPVFLPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

Db 234 EPKSCDKHTCPCPAPPELLGSPVFLPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 293  
QY 61 NMVVDGVEVHNATKPREEQYNSTYRWVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120  
Db 294 NMVVDGVEVHNATKPREEQYNSTYRWVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 353  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESGNQPENNYKTTTP 180  
Db 354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESGNQPENNYKTTTP 413  
QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKQKSLSPGK 232  
Db 414 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKQKSLSPGK 465  
RESULT 172  
ADL23150  
ID ADL23150 standard; protein; 465 AA.  
XX AC ADL23150;  
XX XX  
DT 20-MAY-2004 (first entry)  
XX DE Mouse/human ING-1 antibody heavy chain, low risk engineered.  
XX XX  
KW Human; mouse; mutein; bactericidal/permeability-increasing protein; BPI;  
KW Ep-CAM; CAB2.1; recombinant polypeptide production; ING-1; antibody;  
KW anti-CD18 antibody; cosmetic product; mutant.  
XX XX  
OS Mus sp.  
OS Homo sapiens.  
OS Chimeric.  
OS Synthetic.  
XX XX  
PN US2003203447-A1.  
XX XX  
PD 30-OCT-2003.  
XX XX  
PF 31-MAR-2003; 2003US-00404724.  
XX XX  
PR 29-MAR-2002; 2002US-0368530P.  
XX XX (HORW/) HORWITZ A H.  
PI Horwitz AH;  
XX XX  
DR WPI; 2003-875646/81.  
DR N-PSDB; ADL231149.  
XX XX  
PT Producing recombinant polypeptide, useful for treating or diagnosing  
PT comprises culturing cells transformed or transfected with a vector  
PT comprising multiple copies of a transcription unit separated by a  
PT selective marker gene.  
XX XX  
PS Example 6; SEQ ID NO 23; 133pp; English.  
XX XX  
CC The invention relates to producing a recombinant polypeptide comprising  
CC culturing cells, which have been transformed or transfected with a  
CC vector, or its segment comprising multiple copies of a transcription unit  
CC separated by at least one selective marker gene, where the transcription  
CC unit encodes a polypeptide under selective conditions. Also included are  
CC a vector or segment comprising multiple copies of a transcription unit  
CC separated by at least one selective marker gene where the transcription  
CC unit encodes a polypeptide, a host cell comprising an expression vector  
CC or segment and a stable cell line comprising an expression vector or  
CC segment. Each transcription unit is under the control of its own promoter  
CC and 3' untranslated region, where the promoter is an SV40, HSV, bovine  
CC growth hormone, thymidine kinase, MPSV, mouse beta globin, human EF1, MSV  
CC -LTR, RSV, MMTV-LTR, CMV, MLV, Chinese hamster elongation factor or mouse  
CC Abelson LTR promoter. The expression vector further comprises multiple  
CC enhancers. The transcription unit also encodes two different subunits of  
CC a multimeric protein, an immunoglobulin light and heavy chain  
CC polypeptides or at least the variable regions of the immunoglobulin light  
CC and heavy chain polypeptides. It further encodes a BPI protein  
CC (bactericidal/permeability-increasing protein) product. The protein  
CC product BPI protein fragment, BPI analogue, BPI variant or BPI-derived  
CC peptide. The transcription unit encodes an RPI21 and is under the  
CC control of an hCMV promoter and mouse light chain 3' untranslated region,  
CC where the vector further comprises 0, 1 or 2 copies of a human heavy  
CC chain enhancer and either a gpt or neo gene. Other genes suitable for  
CC expression using the method of the invention are Ep-CAM and CAB2.1 (both  
CC not defined). The immunoglobulin may be the ING-1 chimaeric mouse/human  
CC antibody (or humanised versions or proline substitution mutants) or an  
CC anti-CD18 antibody. The method is useful for producing recombinant  
CC polypeptide. Recombinant polypeptide compositions are useful in  
CC therapies, in diagnostic procedures or as tools in preventive medicine.  
CC Recombinant polypeptides are also found in a wide array of both health  
CC and cosmetic products, used to increase the quality of life. Complex  
CC polypeptide products are also routinely used in research laboratories  
CC both as end products of analyses and as agents in assays for the study or  
CC preparation of other molecules. Advantages of the present invention  
CC includes increased recombinant polypeptide production, increased  
CC production efficiency, greater control and/or regulation over the  
CC qualities of the polypeptide expressed, increased stability of cell  
CC lines, and/or decreased costs for materials, reagents and/or other  
CC resources. The present sequence represents a light or heavy chain from a  
CC antibody gene suitable for inclusion in the transcription unit of the  
CC invention.  
XX XX

CC polypeptides or at least the variable regions of the immunoglobulin light  
 CC and heavy chain polypeptides. It further encodes a BPI protein  
 CC (bactericidal/permeability-increasing protein) product. The protein  
 CC product BPI protein fragment, BPI analogue, BPI variant or BPI-derived  
 CC peptide. The transcription unit encodes an rBPI21 and is under the  
 CC control of an hCMV promoter and mouse light chain 3' untranslated region,  
 CC where the vector further comprises 0, 1 or 2 copies of a human heavy  
 CC chain enhancer and either a gpt or neo gene. Other genes suitable for  
 CC expression using the method of the invention are Ep-CAM and CAB2.1 (both  
 CC not defined). The immunoglobulin may be the ING-1 chimeric mouse/human  
 CC antibody (or humanised versions or proline substitution mutants) or an  
 CC anti-CD18 antibody. The method is useful for producing recombinant  
 CC polypeptide. Recombinant polypeptide compositions are useful in  
 CC therapies, in diagnostic procedures or as tools in preventive medicine.  
 CC Recombinant polypeptides are also found in a wide array of both health  
 CC and cosmetic products, used to increase the quality of life. Complex  
 CC polypeptide products are also routinely used in research laboratories  
 CC both as end products of analyses and as agents in assays for the study or  
 CC preparation of other molecules. Advantages of the present invention  
 CC includes increased recombinant polypeptide production, increased  
 CC production efficiency, greater control and/or regulation over the  
 CC qualities of the polypeptide expressed, increased stability of cell  
 CC lines, and/or decreased costs for materials, reagents and/or other  
 CC resources. The present sequence represents a mutated (humanised or  
 CC proline mutant) light or heavy chain from an antibody gene suitable for  
 CC inclusion in the transcription unit of the invention.

XX Sequence 465 AA;

Query Match 100.0%; Score 1263; DB 7; Length 465;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 234 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 293  
 QY 61 NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 120  
 DB 294 NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 353  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 413  
 QY 181 PVLDSDGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 414 PVLDSDGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 465

RESULT 173

AAR22759

ID AAR22759 standard; protein; 467 AA.

XX AC

XX AAR22759;

DT 25-MAR-2003 (revised)

DT 20-OCT-1992 (first entry)

XX Reshaped CD4 antibody heavy chain CD4VHNEW-Ser30.

XX Antigen; CDR; complementarity determining region; graft rejection;  
 XX autoimmune diseases; rheumatoid arthritis; allergy.  
 XX Rattus rattus.

OS

XX Key Location/Qualifiers

XX Peptide 1..19

XX Peptide /note= "signal peptide"

XX Peptide 20..467

XX Peptide /note= "mature peptide"

XX Region 50..54

XX /note= "Complementarity determining region 1"

FT Region 69..85  
 FT /note= "Complementarity determining region 2"  
 FT Region 118..126  
 FT /note= "Complementarity determining region 3"

XX W09205274-A.

XX 02-APR-1992.

XX 16-SEP-1991; 91WO-GB001578.

XX 17-SEP-1990; 90GB-00020282.

XX (GORM/) GORMAN S D.

XX Gorman SD, Clark MR, Cobbold SP, Waldmann H;

XX WPI; 1992-132139/16.

XX N-PSDB; AAQ23581.

XX Humanisation of antibodies binding to human CD4 antigen - by mutation of  
 XX framework-encoding regions of DNA encoding variable domain of rat or  
 XX mouse antibody chain.  
 XX Disclosure; Fig 7; 74pp; English.  
 XX The sequence is that of the reshaped CD4 antibody heavy chain CD4VHNEW-  
 XX Ser30. Reshaped CD4 antibody can be used to induce tolerance against an  
 XX antigen. It can also be used to alleviate autoimmune diseases such as  
 XX rheumatoid arthritis, and to prevent graft rejection. Tolerance to a  
 XX graft, e.g. an organ graft or a bone marrow transplantation can also be  
 XX useful to alleviate allergies. Tolerance to allergens could also be  
 XX achieved. See also AAR22753-R22763. (Updated on 25-MAR-2003 to correct PI  
 XX field.)

XX Sequence 467 AA;

Query Match 100.0%; Score 1263; DB 2; Length 467;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 236 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 295  
 QY 61 NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 120  
 DB 296 NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 355  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 415  
 QY 181 PVLDSDGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 416 PVLDSDGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 467

RESULT 174

AAR22758

ID AAR22758 standard; protein; 467 AA.

XX AC

XX AAR22758;

XX 25-MAR-2003 (revised)

DT 20-OCT-1992 (first entry)

XX Reshaped CD4 antibody heavy chain CD4VHNEW-Thr30.

XX Antigen; CDR; complementarity determining region; graft rejection;  
 XX autoimmune diseases; rheumatoid arthritis; allergy.  
 XX Rattus rattus.

```

XX FH Key Location/Qualifiers
XX FT Peptide 1..19
XX FT Peptide /note= "signal peptide"
XX FT Peptide /note= "mature peptide"
XX FT Region 50..54
XX FT Region /note= "Complementarity determining region 1"
XX FT Region /note= "Complementarity determining region 2"
XX FT Region /note= "Complementarity determining region 3"
XX PN WO9205274-A.
XX PD 02-APR-1992.
XX PF 16-SEP-1991; 91WO-GB001578.
XX PR 17-SEP-1990; 90GB-00020282.
XX PA (GORM/) GORMAN S D.
XX PI Gorman SD, Clark MR, Cobbold SP, Waldmann H;
XX DR WPI; 1992-132139/16.
XX DR N-PSDB; AAQ23571.
XX PT Humanisation of antibodies binding to human CD4 antigen - by mutation of
XX FT framework-encoding regions of DNA encoding variable domain of rat or
XX FT mouse antibody chain.
XX PS Disclosure; Fig 6; 74pp; English.
XX CC The sequence is that of the reshaped CD4 antibody heavy chain CDAVHNEW-
XX CC Thr30. Reshaped CD4 antibody can be used to induce tolerance against an
XX CC antigen. It can also be used to alleviate autoimmune diseases such as
XX CC rheumatoid arthritis, and to prevent graft rejection. Tolerance to a
XX CC graft, e.g. an organ graft or a bone marrow transplantation can also be
XX CC useful to alleviate allergies. Tolerance to allergens could also be
XX CC achieved. See also AAR22753-R22763. (Updated on 25-MAR-2003 to correct PI
XX CC field.)
XX SQ Sequence 467 AA;
Query Match 100.0%; Score 1263; DB 2; Length 467;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDRLMISRTPEVTCVVDVSHEDPEVKF 60
DB 236 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDRLMISRTPEVTCVVDVSHEDPEVKF 295
QY 61 NWTVDGVEVHNAKTPREQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 120
DB 296 NWTVDGVEVHNAKTPREQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 355
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 356 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 415
QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
DB 416 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 467

RESULT 175
ADM05608
ID ADM05608 standard; protein; 467 AA.
XX AC ADM05608;
XX DT 20-MAY-2004 (first entry)

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XX DE Human protein of the invention SEQ ID NO:4293.
XX KW human; gene therapy; diagnostic marker; pharmaceutical.
XX OS Homo sapiens.
XX PN EP1347046-A1.
XX PD 24-SEP-2003.
XX PF 12-APR-2002; 2002EP-00008400.
XX PR 22-MAR-2002; 2002JP-00137785.
XX PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
XX PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
XX PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;
XX DR WPI; 2003-723558/69.
XX DR N-PSDB; ADM03165.
XX PT New polynucleotides and polypeptides are useful in gene therapy, for
XX FT developing a diagnostic marker or medicines for regulating their
XX FT expression and activity, or as a target of gene therapy.
XX PS Claim 1; SEQ ID NO 4293; 305pp; English.
XX CC The invention relates to a novel human polynucleotide and the encoded
XX CC polypeptide. A polynucleotide of the invention may have a use in gene
XX CC therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful
XX CC as a primer for synthesizing the polynucleotide or as a probe for
XX CC detecting the polynucleotide. The polynucleotides ADM0316-ADM03758 are
XX CC useful in gene therapy, for developing a diagnostic marker or medicines
XX CC for regulating their expression and activity, or as a target of gene
XX CC therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides
XX CC are useful as pharmaceutical agents. The present sequence represents a
XX CC protein sequence of the invention.
XX SQ Sequence 467 AA;
Query Match 100.0%; Score 1263; DB 7; Length 467;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDRLMISRTPEVTCVVDVSHEDPEVKF 60
DB 236 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDRLMISRTPEVTCVVDVSHEDPEVKF 295
QY 61 NWTVDGVEVHNAKTPREQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 120
DB 296 NWTVDGVEVHNAKTPREQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 355
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 356 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 415
QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
DB 416 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 467

RESULT 176
ADM41567
ID ADM41567 standard; protein; 467 AA.
XX AC ADM41567;
XX DT 03-JUN-2004 (first entry)
XX DE Anti-interleukin-1 receptor type 1 antibody heavy chain.

```

XX Human; monoclonal antibody; antibody; interleukin-1; receptor;  
KW antiasthmatic; antiinflammatory; dermatological; antiallergic;  
KW protozoacide; antirheumatic; antiarthritic; osteopathic; vasotropic;  
KW analgesic; antidiabetic; nephrotoxic; antianemic; nootropic;  
KW anticonvulsant; dermatological; antigout; antiparkinsonian; antidiabetic;  
cytostatic.  
XX Homo sapiens.  
XX WO2004022718-A2.  
XX 18-MAR-2004.  
XX 05-SEP-2003; 2003WO-US027978.  
XX 06-SEP-2002; 2002US-0408719P.  
XX (AMGE-) AMGEN INC.  
XX Varnum B, Vezina C, Witte A, Qian X, Martin F, Huang H;  
PI Elliott G;  
XX WPI; 2004-248462/23.  
XX N-PSDB; ADM41566.  
XX Isolated human antibody that specifically binds interleukin-1 receptor  
PT type 1 (IL-1R1) useful for treating IL-1 mediated diseases such as  
PT rheumatoid arthritis, osteoarthritis and inflammatory conditions.  
XX Claim 3; SEQ ID NO 32; 179pp; English.  
XX The present sequence is that of a human anti-interleukin-1 receptor type  
CC 1 (IL-1R1) monoclonal antibody (MAB) heavy chain. The invention provides  
CC antibodies that comprise this sequence. Human MABs to IL-1R1 were  
CC prepared using the HCo7 strain of transgenic mice, which expresses human  
CC antibody genes. These mice were immunised with purified recombinant IL-  
CC 1R1, and splenocytes from immunised mice were fused to a mouse myeloma  
CC cell line to generate hybridomas. Hybridomas which secreted a MAB that  
CC bound with high avidity to IL-1R1 were selected. The MABs inhibit IL-1  
CC signalling by competing with IL-1 $\beta$  and IL-1 $\alpha$  binding to IL-1R.  
CC These MABs, as well as single chain antibodies and Fab'2 antibodies  
CC antibodies, Fab antibodies, Fab' antibodies and (Fab')2 antibodies  
CC derived from them, are used in methods of treating IL-1 mediated diseases  
CC or for detecting the amount of IL-1R1 in a sample. IL-1 mediated diseases  
CC include acute pancreatitis, amyotrophic lateral sclerosis, Alzheimer's  
CC disease, cachexia, anorexia, asthma, atherosclerosis, autoimmune  
CC vasculitis, chronic fatigue syndrome, Clostridium associated illnesses,  
CC coronary conditions, cancer including leukaemia and tumour metastasis,  
CC diabetes, endometriosis, fever, fibromyalgia, glomerulonephritis, graft  
CC versus host disease, osteoarthritis, rheumatoid arthritis, inflammatory  
CC eye disease, ischaemia, Kawasaki's disease, learning impairment, lung  
CC diseases, multiple sclerosis, myopathy, osteoporosis, pain, Parkinson's  
CC disease, periodontal disease, pre-term labour, psoriasis, reperfusion  
CC injury, septic shock, side effects of radiation therapy, temporal  
CC mandibular joint disease, sleep disturbance, uveitis, or an inflammatory  
CC condition resulting from strain, sprain, cartilage damage, trauma,  
CC orthopaedic surgery, infection or other disease processes.  
XX SQ Sequence 467 AA;  
Query Match 100.0%; Score 1263; DB 8; Length 467;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 236 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 295  
OY 61 NWYDGVVHNAKTPREEQYNSTRVSVLTVLHQLWLNKGYKCKVSNKALPAPIEKT 120  
Db 296 NWYDGVVHNAKTPREEQYNSTRVSVLTVLHQLWLNKGYKCKVSNKALPAPIEKT 355

OY 121 ISKAGQRPQVYTLPPSRDELTKNOVSLCLVKGFYPSDIAVWESNQPPENNYKTP 180  
Db 356 ISKAGQRPQVYTLPPSRDELTKNOVSLCLVKGFYPSDIAVWESNQPPENNYKTP 415  
OY 181 PVLDSGDSFFLYSKLTVDKSRWQGNVFSVSMHEALHNYHTOKSLSLSPGK 232  
Db 416 PVLDSGDSFFLYSKLTVDKSRWQGNVFSVSMHEALHNYHTOKSLSLSPGK 467  
RESULT 177  
AAE27928  
ID AAE27928 standard; protein; 468 AA.  
XX  
XX AAE27928;  
XX 27-DEC-2002 (first entry)  
XX Human C5E10 antibody heavy chain protein.  
XX Human; C5E10 antibody; C2B8 antibody; tumour associated antigen; TAG-72;  
KW neoplasm; neoplastic disorder; haematologic neoplasm; colon cancer;  
KW non-Hodgkin's lymphoma; haematologic malignancy; tumour.  
XX Homo sapiens.  
XX WO200260955-A2.  
XX 08-AUG-2002.  
XX 29-JAN-2002; 2002WO-US002373.  
XX 29-JAN-2001; 2001US-0264318P.  
PR 16-NOV-2001; 2001US-0331481P.  
XX (IDEC-) IDEC PHARM CORP.  
XX Braslawsky GR, Hanna N, Chinn P;  
XX WPI; 2002-698547/75.  
XX N-PSDB; AAD45757.  
XX Novel domain deleted C5E10 antibody reactive with tumor associated antigen  
PT -72, or C2B8 antibody reactive with CD20, useful for treating  
PT myelosuppressed patient suffering from a neoplastic disorder.  
XX Example 3; Fig 6A; 74pp; English.  
XX The present invention relates to domain deleted C5E10 or C2B8 antibodies.  
CC Domain deleted C5E10 antibodies comprise a heavy chain human C5E10 domain  
CC deleted sequence in which CH2 domain has been deleted and are reactive  
CC with tumour associated antigen (TAG)-72. The C2B8 antibodies are reactive  
CC with CD20 and comprise a heavy chain having a sequence of a derived  
CC domain deleted C2B8 construct where the CH2 domain has been deleted.  
CC Sequences of the invention are useful for imaging a neoplasm. They are  
CC also useful for treating myelosuppressed patients suffering from non-  
CC neoplastic disorder such as haematologic neoplasm, preferably non-  
CC Hodgkin's lymphoma. Antibodies of the invention are also used to treat  
CC neoplastic disorder, colon cancer and haematologic malignancy. They are  
CC useful for reducing tumour size, inhibiting tumour growth and/or  
CC prolonging the survival time of tumour-bearing animals and for treating  
CC tumours. The present sequence is human C5E10 heavy chain protein. This  
CC sequence is used in the exemplification of the invention  
XX SQ Sequence 468 AA;  
Query Match 100.0%; Score 1263; DB 5; Length 468;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 237 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 296

QY 61 NWYVDGVEVHNKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 297 NWYVDGVEVHNKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 356  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 357 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 416  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232  
 DB 417 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 468

RESULT 178  
 ABB82837  
 ID ABB82837 standard; protein; 468 AA.  
 AC ABB82837;  
 XX  
 DT 31-MAR-2003 (first entry)  
 XX  
 DE Antibody C5E10 heavy chain.  
 XX  
 KW C5E10; antibody; cytostatic; antiallergic; antianemic; antiasthmatic;  
 KW vsotropic; immunomodulator; protozoacide; antidiabetic; nephrotropic;  
 KW thymimetic; hepatotropic; haemostatic; antileptotic; antibacterial;  
 KW neuroprotective; antipsoriatic; antirheumatic; antiarthritic; antiulcer;  
 KW dermatological; immunosuppressive; antiinflammatory.  
 XX  
 OS Homo sapiens.  
 XX  
 KW Monoclonal antibody; 3D6; complementarity determining region; CDR; mouse;  
 PN human; humanised antibody; antibody; Alzheimer's disease;  
 XX Down's syndrome; cerebral amyloid angiopathy; neuroprotective; nootropic.  
 XX  
 OS Mus sp.  
 OS Homo sapiens.  
 OS Chimeric.  
 XX  
 FH Key  
 FT Peptide 1..19  
 FT Protein /label= Signal\_peptide  
 FT /note= Mature\_peptide  
 FT /note= "the mature heavy chain is claimed in Claim 5"  
 FT Region 20..138  
 FT /note= "heavy chain variable region, claimed in Claim 4"  
 FT Region 50..54  
 FT /note= "CDR1"  
 FT Region 69..85  
 FT /note= "CDR2"  
 FT Region 118..127  
 FT /note= "CDR3"  
 XX  
 PN WO200288306-A2.  
 XX  
 PD 07-NOV-2002.  
 XX  
 PF 26-APR-2002; 2002WO-US011853.  
 XX  
 PR 30-APR-2001; 2001US-0287539P.  
 XX  
 PA (ELIL ) LILLY & CO ELI.  
 XX  
 PI Tsurushita N, Vasquez M;  
 XX  
 DR WPI; 2003-183835/18.  
 DR N-PSDB; ABZ24633, ABZ24635.  
 XX  
 PT New humanized forms of mouse 3D6 antibodies, useful for treating Down's  
 PT syndrome, (pre-)clinical Alzheimer's disease or (pre-)clinical cerebral  
 PT amyloid angiopathy, or for inhibiting formation of or reducing Abeta  
 XX plaque in the brain.

QY 61 NWYVDGVEVHNKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 297 NWYVDGVEVHNKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 356  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 357 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 416  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232  
 DB 417 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 468

RESULT 178  
 ABB82837  
 ID ABB82837 standard; protein; 468 AA.  
 AC ABB82837;  
 XX  
 DT 31-MAR-2003 (first entry)  
 XX  
 DE Antibody C5E10 heavy chain.  
 XX  
 KW C5E10; antibody; cytostatic; antiallergic; antianemic; antiasthmatic;  
 KW vsotropic; immunomodulator; protozoacide; antidiabetic; nephrotropic;  
 KW thymimetic; hepatotropic; haemostatic; antileptotic; antibacterial;  
 KW neuroprotective; antipsoriatic; antirheumatic; antiarthritic; antiulcer;  
 KW dermatological; immunosuppressive; antiinflammatory.  
 XX  
 OS Homo sapiens.  
 XX  
 KW Monoclonal antibody; 3D6; complementarity determining region; CDR; mouse;  
 PN human; humanised antibody; antibody; Alzheimer's disease;  
 XX Down's syndrome; cerebral amyloid angiopathy; neuroprotective; nootropic.  
 XX  
 OS Mus sp.  
 OS Homo sapiens.  
 OS Chimeric.  
 XX  
 FH Key  
 FT Peptide 1..19  
 FT Protein /label= Signal\_peptide  
 FT /note= Mature\_peptide  
 FT /note= "the mature heavy chain is claimed in Claim 5"  
 FT Region 20..138  
 FT /note= "heavy chain variable region, claimed in Claim 4"  
 FT Region 50..54  
 FT /note= "CDR1"  
 FT Region 69..85  
 FT /note= "CDR2"  
 FT Region 118..127  
 FT /note= "CDR3"  
 XX  
 PN WO200288306-A2.  
 XX  
 PD 07-NOV-2002.  
 XX  
 PF 26-APR-2002; 2002WO-US011853.  
 XX  
 PR 30-APR-2001; 2001US-0287539P.  
 XX  
 PA (ELIL ) LILLY & CO ELI.  
 XX  
 PI Tsurushita N, Vasquez M;  
 XX  
 DR WPI; 2003-183835/18.  
 DR N-PSDB; ABZ24633, ABZ24635.  
 XX  
 PT New humanized forms of mouse 3D6 antibodies, useful for treating Down's  
 PT syndrome, (pre-)clinical Alzheimer's disease or (pre-)clinical cerebral  
 PT amyloid angiopathy, or for inhibiting formation of or reducing Abeta  
 XX plaque in the brain.

Query Match 100.0%; Score 1263; DB 6; Length 468;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-91;

PS Disclosure; Page 13-14; 54pp; English.

XX The present sequence is that of a preferred heavy chain of a humanised antibody of the present invention. In the variable region of this sequence, the complementarity determining regions (CDRs) originate from murine monoclonal antibody 3D6 and the framework region from human germline VH segment DP-45 and J segment JH4. Novel humanised antibodies of the invention have CDRs from 3D6 and human framework sequences. These humanised antibodies have binding affinities (affinity and epitope location) approximately the same as those of the mouse 3D6 antibody. The invention includes antibodies, single chain antibodies, and their fragments, as well as nucleotide sequences, vectors, transformed host cells, and methods of using the humanised antibody to treat, prevent, alleviate, reverse or otherwise ameliorate symptoms and/or pathology associated with Down's syndrome, (pre-)clinical Alzheimer's disease or (pre-)clinical cerebral amyloid angiopathy, and to inhibit formation or reduce beta plaque in the brain. (Updated on 23-OCT-2003 to standardise OS field)

XX

Sequence 468 AA;

Query Match 100.0%; Score 1263; DB 6; Length 468;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCTCPAPPELLGGPSVFLFPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 237 EPKSCDKHTCTCPAPPELLGGPSVFLFPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 296

QY 61 NMYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 297 NMYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 356

QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 357 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 416

QY 181 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVMEALHNHYTQKSLSLSPGK 232  
DB 417 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVMEALHNHYTQKSLSLSPGK 468

RESULT 180  
ID ADR46819  
XX ADR46819 standard; protein; 468 AA.  
AC ADR46819;  
XX  
DT 19-NOV-2004 (first entry)  
DE Human antibody B11 heavy chain variable region protein SEQ ID NO:2.  
XX molecular conjugate; monoclonal antibody; human antigen presenting cell;  
KW antigen presenting cell; APC; human; beta human chorionic gonadotropin;  
KW betaHCG; beta chorionic gonadotropin; antibody;  
KW T cell-mediated immune response; immunisation; cytostatic; antimicrobial;  
KW immunosuppressive; anti-HIV; hepatotropic; virucide; antimalarial;  
KW CD8 agonist; vaccine; autoimmune disorder; cancer; infectious disease;  
KW melanoma; fibrosarcoma; leukaemia; HIV; hepatitis; malaria; herpes;  
KW antibody B11; heavy chain variable region.  
XX  
OS Homo sapiens.  
XX  
XX WO2004/07432-A2.  
PN  
XX  
XX 02-SEP-2004.  
PD  
XX  
XX 30-JAN-2004; 2004WO-US002725.  
PF  
XX  
XX 31-JAN-2003; 2003US-0443979P.  
PR  
XX  
XX (MEDA-) MEDAREX INC.  
PA  
XX

PI Keler T, Endres M, He L, Ramakrishna V;  
XX  
XX WPI: 2004-635555/61.  
DR N-PSDB; ADR46818.  
XX  
PT New molecular conjugate having a monoclonal antibody that binds to human APCs linked to a beta human chorionic gonadotropin, useful for inducing a cytotoxic T cell response in cancers and infectious diseases.  
XX  
XX Claim 13; SEQ ID NO 2; 82pp; English.  
PS  
XX The present invention describes a molecular conjugate comprising a monoclonal antibody that binds to human antigen presenting cells (APCs) linked to beta human chorionic gonadotropin (betaHCG), where the antibody comprises a heavy and/or light chain variable region derived from a human VH5-51 or Vk-115 germline sequence with the 98 or 95 amino acid sequences of SEQ ID NO:30 or 32 (ADR46847, or ADR46849), respectively. Also described: (1) a molecular conjugate comprising a human antibody heavy chain and a human antibody light chain, where either or both chains are linked to betaHCG; (2) a molecular conjugate comprising a human single chain antibody that binds to human APCs linked to betaHCG, where the conjugate comprises the 411 amino acid sequence of SEQ ID NO:12 (ADR46829); (3) a composition comprising any of the molecular conjugates as described above, and a carrier, optionally in combination with an adjuvant; (4) inducing or enhancing a T cell-mediated immune response, against betaHCG, comprising contacting any of the molecular conjugates described above with APCs such that the antigen is processed and presented to T cells in a manner which induces or enhances a T cell-mediated response against the antigen; (5) immunising a subject comprising administering any of the molecular conjugates described above, optionally in combination with an adjuvant, a cytokine which stimulates proliferation of dendritic cells and/or an immunostimulatory agent; and (6) inducing or enhancing a cytotoxic T cell response against an antigen, comprising forming a conjugate of the antigen and a monoclonal antibody which binds to APCs, and contacting the conjugate either in vivo or ex vivo with APCs such that the antigen is internalised, processed and presented to T cells in a manner which induces or enhances a cytotoxic T cell response against the antigen. The molecular conjugate has cytostatic, antimicrobial, immunosuppressive, anti-HIV, hepatotropic, virucide and antimalarial activities, and can be used as a CD8 agonist, and in vaccines. The methods and compositions of the present invention are useful for inducing a cytotoxic T cell response, and in particular for treating autoimmune disorders, cancers and infectious diseases by eliciting a potent antigen-specific cytotoxic T lymphocyte response, including melanoma, fibrosarcoma, leukaemia, HIV, hepatitis, malaria and herpes. The present sequence represents a human antibody B11 heavy chain variable region, which is used in the exemplification of the present invention.

XX  
SQ Sequence 468 AA;

Query Match 100.0%; Score 1263; DB 8; Length 468;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCTCPAPPELLGGPSVFLFPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 234 EPKSCDKHTCTCPAPPELLGGPSVFLFPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

QY 61 NMYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 294 NMYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 354 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 413

QY 181 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVMEALHNHYTQKSLSLSPGK 232  
DB 414 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVMEALHNHYTQKSLSLSPGK 465

RESULT 181

AD41555  
ID ADM41555 standard; protein; 469 AA.  
XX AC ADM41555;  
XX XX  
DT 03-JUN-2004 (first entry)  
XX DE  
DE Anti-interleukin-1 receptor type 1 antibody heavy chain.  
XX KW Human; monoclonal antibody; antibody; interleukin-1; receptor;  
KW antiasthmatic; antiinflammatory; dermatological; antiallergic;  
KW protozoacide; antirheumatic; antiarthritic; osteopathic; vasotropic;  
KW analgesic; antidiabetic; nephrotropic; antianemic; nootropic;  
KW anticonvulsant; dermatological; antigout; antiparkinsonian; antidiabetic;  
KW cytostatic.  
XX KW  
OS Homo sapiens.  
XX XX  
PN WO2004022718-A2.  
XX XX  
PD 18-MAR-2004.  
XX XX  
PF 05-SEP-2003; 2003WO-US027978.  
XX XX  
PR 06-SEP-2002; 2002US-0408719P.  
XX XX  
PA (AMGE-) AMGEN INC.  
XX XX  
PI Varnum B, Vezina C, Witte A, Qian X, Martin F, Huang H;  
PI Elliott G;  
XX WPI; 2004-248462/23.  
XX N-PSDB; ADM41554.  
XX XX  
PT Isolated human antibody that specifically binds interleukin-1 receptor  
PT type 1 (IL-1R1) useful for treating IL-1 mediated diseases such as  
PT rheumatoid arthritis, osteoarthritis and inflammatory conditions.  
XX XX  
PS Claim 3; SEQ ID NO 20; 179pp; English.  
XX XX  
CC The present sequence is that of a human anti-interleukin-1 receptor type  
CC 1 (IL-1R1) monoclonal antibody (MAB) heavy chain. The invention provides  
CC antibodies that comprise this sequence. Human MABs to IL-1R1 were  
CC prepared using the HCo7 strain of transgenic mice, which expresses human  
CC antibody genes. These mice were immunised with purified recombinant IL-  
CC 1R1, and splenocytes from immunised mice were fused to a mouse myeloma  
CC cell line to generate hybridomas. Hybridomas which secreted a MAB that  
CC bound with high avidity to IL-1R1 were selected. The MABs inhibit IL-1  
CC signalling by competing with IL-1beta and IL-1alpha binding to IL-1R.  
CC These MABs, as well as single chain antibodies and Fab'2 antibodies  
CC derived from them, are used in methods of treating IL-1 mediated diseases  
CC or for detecting the amount of IL-1R1 in a sample. IL-1 mediated diseases  
CC include acute pancreatitis, amyotrophic lateral sclerosis, Alzheimer's  
CC disease, cachexia, anorexia, asthma, atherosclerosis, autoimmune  
CC vasculitis, chronic fatigue syndrome, Clostridium associated illnesses,  
CC coronary conditions, cancer including leukaemia and tumour metastasis,  
CC diabetes, endometriosis, fever, fibromyalgia, glomerulonephritis, graft  
CC versus host disease, osteoarthritis, rheumatoid arthritis, inflammatory  
CC eye disease, ischaemia, Kawasaki's disease, learning impairment, lung  
CC diseases, multiple sclerosis, myopathy, osteoporosis, pain, Parkinson's  
CC disease, periodontal disease, pre-term labour, psoriasis, reperfusion  
CC injury, septic shock, side effects of radiation therapy, temporal  
CC mandibular joint disease, sleep disturbance, uveitis, or an inflammatory  
CC condition resulting from strain, sprain, cartilage damage, trauma,  
CC orthopaedic surgery, infection or other disease processes.  
XX XX  
SQ Sequence 469 AA;  
Query Match 100.0%; Score 1263; DB 8; Length 469;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 238 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDITLMISRTPEVTCVVDVSHEDPEVKF 297  
QY 61 NMVYDGVGVHNAKTKPREEQYNSTYRVSVLTFLVHODWLNKGKEYCKVSNKALPAPIEKT 120  
DB 298 NMVYDGVGVHNAKTKPREEQYNSTYRVSVLTFLVHODWLNKGKEYCKVSNKALPAPIEKT 357  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 180  
DB 358 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 417  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSNVMEALHNHYTQKSLSLSPGK 232  
DB 418 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSNVMEALHNHYTQKSLSLSPGK 469

RESULT 182  
ADM41561  
ID ADM41561 standard; protein; 469 AA.  
XX AC ADM41561;  
XX XX  
DT 03-JUN-2004 (first entry)  
XX DE  
DE Anti-interleukin-1 receptor type 1 antibody heavy chain.  
XX KW Human; monoclonal antibody; antibody; interleukin-1; receptor;  
KW antiasthmatic; antiinflammatory; dermatological; antiallergic;  
KW protozoacide; antirheumatic; antiarthritic; osteopathic; vasotropic;  
KW analgesic; antidiabetic; nephrotropic; antianemic; nootropic;  
KW anticonvulsant; dermatological; antigout; antiparkinsonian; antidiabetic;  
KW cytostatic.  
XX KW  
OS Homo sapiens.  
XX XX  
PN WO2004022718-A2.  
XX XX  
PD 18-MAR-2004.  
XX XX  
PF 05-SEP-2003; 2003WO-US027978.  
XX XX  
PR 06-SEP-2002; 2002US-0408719P.  
XX XX  
PA (AMGE-) AMGEN INC.  
XX XX  
PI Varnum B, Vezina C, Witte A, Qian X, Martin F, Huang H;  
PI Elliott G;  
XX WPI; 2004-248462/23.  
XX N-PSDB; ADM41560.  
XX XX  
DR Isolated human antibody that specifically binds interleukin-1 receptor  
DR type 1 (IL-1R1) useful for treating IL-1 mediated diseases such as  
DR rheumatoid arthritis, osteoarthritis and inflammatory conditions.  
XX XX  
PS Claim 3; SEQ ID NO 26; 179pp; English.  
XX XX  
CC The present sequence is that of a human anti-interleukin-1 receptor type  
CC 1 (IL-1R1) monoclonal antibody (MAB) heavy chain. The invention provides  
CC antibodies that comprise this sequence. Human MABs to IL-1R1 were  
CC prepared using the HCo7 strain of transgenic mice, which expresses human  
CC antibody genes. These mice were immunised with purified recombinant IL-  
CC 1R1, and splenocytes from immunised mice were fused to a mouse myeloma  
CC cell line to generate hybridomas. Hybridomas which secreted a MAB that  
CC bound with high avidity to IL-1R1 were selected. The MABs inhibit IL-1  
CC signalling by competing with IL-1beta and IL-1alpha binding to IL-1R.  
CC These MABs, as well as single chain antibodies and Fab'2 antibodies  
CC derived from them, are used in methods of treating IL-1 mediated diseases  
CC or for detecting the amount of IL-1R1 in a sample. IL-1 mediated diseases  
CC include acute pancreatitis, amyotrophic lateral sclerosis, Alzheimer's  
CC disease, cachexia, anorexia, asthma, atherosclerosis, autoimmune  
CC vasculitis, chronic fatigue syndrome, Clostridium associated illnesses,  
CC coronary conditions, cancer including leukaemia and tumour metastasis,  
CC diabetes, endometriosis, fever, fibromyalgia, glomerulonephritis, graft  
CC versus host disease, osteoarthritis, rheumatoid arthritis, inflammatory  
CC eye disease, ischaemia, Kawasaki's disease, learning impairment, lung  
CC diseases, multiple sclerosis, myopathy, osteoporosis, pain, Parkinson's  
CC disease, periodontal disease, pre-term labour, psoriasis, reperfusion  
CC injury, septic shock, side effects of radiation therapy, temporal  
CC mandibular joint disease, sleep disturbance, uveitis, or an inflammatory  
CC condition resulting from strain, sprain, cartilage damage, trauma,  
CC orthopaedic surgery, infection or other disease processes.  
XX XX

CC vasculitis, chronic fatigue syndrome, Clostridium associated illnesses,  
CC coronary conditions, cancer including leukaemia and tumour metastasis,  
CC diabetes, endometriosis, fever, fibromyalgia, glomerulonephritis, graft  
CC versus host disease, osteoarthritis, rheumatoid arthritis, inflammatory  
CC eye disease, ischaemia, Kawasaki's disease, learning impairment, lung  
CC diseases, multiple sclerosis, myopathy, osteoporosis, pain, Parkinson's  
CC disease, periodontal disease, pre-term labour, psoriasis, reperfusion  
CC injury, septic shock, side effects of radiation therapy, temporal  
CC mandibular joint disease, sleep disturbance, uveitis, or an inflammatory  
CC condition resulting from strain, sprain, cartilage damage, trauma,  
CC orthopaedic surgery, infection or other disease processes.

XX SQ Sequence 469 AA;

Query Match 100.0%; Score 1263; DB 8; Length 469;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 238 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 297  
QY 61 NWTVDGVEVHNAKTKPREEQNSTYRVSVLTIVLHODWLNKGEYKCKVSNKALPAPIEKT 120  
DB 298 NWTVDGVEVHNAKTKPREEQNSTYRVSVLTIVLHODWLNKGEYKCKVSNKALPAPIEKT 357  
QY 121 ISKAKGQPREPOVYITLPSSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
DB 358 ISKAKGQPREPOVYITLPSSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 417  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 418 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 469

RESULT 183

AAU72757  
ID AAR22757 standard; protein; 470 AA.  
AC AAR22757;

XX 25-MAR-2003 (revised)  
DT 20-OCT-1992 (first entry)  
DE Reshaped CAMPATH-1 antibody heavy chain.  
XX Antigen; CDR; complementarity determining region; graft rejection;  
KW autoimmune diseases; rheumatoid arthritis; allergy.  
XX Rattus rattus.

Key Location/Qualifiers  
FT Peptide 1..19 /note= "signal peptide"  
FT Peptide 20..470 /note= "mature peptide"  
FT Region 50..54 /note= "Complementarity determining region 1"  
FT Region 69..87 /note= "Complementarity determining region 2"  
FT Region 101..110 /note= "Complementarity determining region 3"

XX WO9205274-A.  
XX 02-APR-1992.  
XX 16-SEP-1991; 91WO-GB001578.  
XX 17-SEP-1990; 90GB-00020282.  
XX (GORM/) GORMAN S D.

XX

PI Gorman SD, Clark MR, Cobbold SP, Waldmann H;

XX WPI; 1992-132139/16.  
DR N-PSDB; AAQ23570.

XX Humanisation of antibodies binding to human CD4 antigen - by mutation of  
PT framework-encoding regions of DNA encoding variable domain of rat or  
PT mouse antibody chain.

XX Disclosure; Fig 5; 74pp; English.

XX The sequence is that of the reshaped CAMPATH-1 heavy chain antibody.  
CC Reshaped CD4 antibody can be used to induce tolerance against an antigen.  
CC It can also be used to alleviate autoimmune diseases such as rheumatoid  
CC arthritis, and to prevent graft rejection. Tolerance to a graft, e.g. an  
CC organ graft or a bone marrow transplantation can also be useful to  
CC alleviate allergies. Tolerance to allergens could also be achieved. See  
CC also AAR22754-R22763. (Updated on 25-MAR-2003 to correct PI field.)

XX SQ Sequence 470 AA;

Query Match 100.0%; Score 1263; DB 2; Length 470;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 239 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298  
QY 61 NWTVDGVEVHNAKTKPREEQNSTYRVSVLTIVLHODWLNKGEYKCKVSNKALPAPIEKT 120  
DB 299 NWTVDGVEVHNAKTKPREEQNSTYRVSVLTIVLHODWLNKGEYKCKVSNKALPAPIEKT 358  
QY 121 ISKAKGQPREPOVYITLPSSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
DB 359 ISKAKGQPREPOVYITLPSSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 418  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 419 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 470

RESULT 184

AAU72789  
ID AAU72789 standard; protein; 470 AA.

AC AAU72789;

XX 06-JUN-2002 (first entry)  
DT Protein #2 in invention relating to von Willebrand factor.

XX Von Willebrand factor.

XX Unidentified.

XX KR99066382-A.

XX 16-AUG-1999.

XX 24-JAN-1998; 98KR-00002265.

XX 24-JAN-1998; 98KR-00002265.

XX (GREC ) KOREA GREEN CROSS CORP.

XX Kim HC, Kim JS, Byun TH, Lee JS, Oh HG, Lee JM, Kim BJ;

XX WPI; 2000-547436/50.

XX N-PSDB; ABK11000.

XX Method for purifying factor VIII using chimera antibody to von Willebrand  
PT factor.

XX Disclosure; Fig 2; 12pp; Korean.  
 XX The present invention relates to von Willebrand factor. The present  
 CC sequence representing a protein of unknown function is given in the  
 CC specification of the present invention  
 XX  
 SQ Sequence 470 AA;  
 Query Match 100.0%; Score 1263; DB 3; Length 470;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHRCPCPAPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 239 EPKSCDKTHRCPCPAPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 298  
 QY 61 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHODWLNGLNGKEYCKVSNKALPAPIEKT 120  
 DB 299 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHODWLNGLNGKEYCKVSNKALPAPIEKT 358  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 359 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 418  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSLSPGK 232  
 DB 419 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSLSPGK 470  
 RESULT 185  
 AAE27923  
 ID AAE27923 standard; protein; 470 AA.  
 AC AAE27923;  
 XX  
 DT 27-DEC-2002 (first entry)  
 DE Human C2B8 antibody heavy chain protein.  
 KW Human; CC49 antibody; C2B8 antibody; tumour associated antigen; TAG-72;  
 KW neoplasm; neoplastic disorder; haematologic neoplasm; colon cancer;  
 KW non-Hodgkin's lymphoma; haematologic malignancy; tumour.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W0200260955-A2.  
 XX  
 PD 08-AUG-2002.  
 XX  
 PF 29-JAN-2002; 2002WO-US002373.  
 XX  
 PR 29-JAN-2001; 2001US-0264318P.  
 PR 16-NOV-2001; 2001US-0331481P.  
 XX  
 PA (IDEC-) IDEC PHARM CORP.  
 XX  
 PI Braslawsky GR, Hanna N, Chinn P;  
 XX  
 DR WPI; 2002-698547/75.  
 DR N-PSDB; AAD45752.  
 XX  
 PT Novel domain deleted CC49 antibody reactive with tumor associated antigen  
 PT -72, or C2B8 antibody reactive with CD20, useful for treating  
 PT myelosuppressed patient suffering from a neoplastic disorder.  
 XX  
 PS Example 1; Fig 1A; 74pp; English.  
 XX  
 CC The present invention relates to domain deleted CC49 or C2B8 antibodies.  
 CC Domain deleted CC49 antibodies comprise a heavy chain human CC49 domain  
 CC deleted sequence in which CH2 domain has been deleted and are reactive  
 CC with tumour associated antigen (TAG)-72. The C2B8 antibodies are reactive  
 CC with CD20 and comprise a heavy chain having a sequence of a derived

CC domain deleted C2B8 construct where the CH2 domain has been deleted.  
 CC Sequences of the invention are useful for imaging a neoplasm. They are  
 CC also useful for treating myelosuppressed patients suffering from  
 CC neoplastic disorder such as haematologic neoplasm, preferably non-  
 CC Hodgkin's lymphoma. Antibodies of the invention are also used to treat  
 CC neoplastic disorder, colon cancer and haematologic malignancy. They are  
 CC useful for reducing tumour size, inhibiting tumour growth and/or  
 CC prolonging the survival time of tumour-bearing animals and for treating  
 CC tumours. The present sequence is human C2B8 heavy chain protein. This  
 CC sequence is used in the exemplification of the invention  
 XX  
 SQ Sequence 470 AA;  
 Query Match 100.0%; Score 1263; DB 5; Length 470;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHRCPCPAPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 239 EPKSCDKTHRCPCPAPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 298  
 QY 61 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHODWLNGLNGKEYCKVSNKALPAPIEKT 120  
 DB 299 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHODWLNGLNGKEYCKVSNKALPAPIEKT 358  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 359 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 418  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSLSPGK 232  
 DB 419 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSLSPGK 470  
 RESULT 186  
 ABB82832  
 ID ABB82832 standard; protein; 470 AA.  
 XX  
 AC ABB82832;  
 XX  
 DT 31-MAR-2003 (first entry)  
 DE Antibody C2B8 heavy chain.  
 XX  
 KW C2B8; antibody; cytostatic; antiallergic; antianemic; antiasthmatic;  
 KW vsotropic; immunomodulator; protozoacide; antidiabetic; nephrotropic;  
 KW thymimetic; hepatotropic; haemostatic; antileprotic; antibacterial;  
 KW neuroprotective; antipsoriatic; antirheumatic; antiarthritic; antiulcer;  
 KW dermatological; immunosuppressive; antiinflammatory.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W0200296948-A2.  
 XX  
 PD 05-DEC-2002.  
 XX  
 PF 29-JAN-2002; 2002WO-US002374.  
 XX  
 PR 29-JAN-2001; 2001US-0264318P.  
 PR 16-NOV-2001; 2001US-0331481P.  
 PR 21-DEC-2001; 2001US-0341858P.  
 XX  
 PA (IDEC-) IDEC PHARM CORP.  
 XX  
 PI Braslawsky GR, Hanna N, Chinn P, Hariharan K;  
 XX  
 DR WPI; 2003-140446/13.  
 DR N-PSDB; AB224016.  
 XX  
 PT Novel dimeric antibody useful for treating immune disorder and neoplastic  
 PT disorder, has several non-covalently associated monomeric subunits.  
 XX  
 PS Example 1; Fig 1A; 78pp; English.

RESULT	187
ADB65576	
ID	ADB65576 standard; protein; 470 AA.
XX	
XX	
AC	ADB65576;
XX	
XX	
DT	04-DEC-2003 (first entry)
XX	
DE	Human protein encoded by clone THYMU20052830.
XX	
KW	Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
KW	cell regeneration; membrane protein; signal transduction-related protein;
KW	transcription-related protein; osteoporosis; neurological disease;
KW	

AA	SQ	Sequence	470	AA;
Query Match		100.0%;	Score 1263;	DB 7;
Best Local Similarity		100.0%;	Pred. No. 3.5e-91;	
Matches 232;		Conservative	0;	Mismatches 0;
		Indels	0;	Gaps 0;

Qy	1	EPK	CDK	TH	TC	PP	CP	AP	ELL	GG	SV	FL	PP	PK	DT	LM	IS	RP	EV	TC	VV	VV	DV	SH	ED	PE	VK	60	
Db	239	EPK	CDK	TH	TC	PP	CP	AP	ELL	GG	SV	FL	PP	PK	DT	LM	IS	RP	EV	TC	VV	VV	DV	SH	ED	PE	VK	298	
Qy	61	NWY	DG	VE	VH	NA	KY	P	RE	Q	NS	TY	R	V	SV	LT	VL	HD	WL	AG	KE	YK	CK	VS	NK	AL	PA	120	
Db	299	NWY	DG	VE	VH	NA	KY	P	RE	Q	NS	TY	R	V	SV	LT	VL	HD	WL	AG	KE	YK	CK	VS	NK	AL	PA	358	
Qy	121	ISK	AG	Q	P	RE	Q	VS	TY	LT	PS	R	DEL	T	N	Q	VS	LT	CL	VK	GF	Y	P	S	D	I	AV	180	
Db	359	ISK	AG	Q	P	RE	Q	VS	TY	LT	PS	R	DEL	T	N	Q	VS	LT	CL	VK	GF	Y	P	S	D	I	AV	418	
Qy	181	PV	LD	S	D	G	S	F	F	Y	S	K	L	T	V	D	K	S	R	W	Q	G	N	F	E	S	C	S	232

```
Db      419 PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTKSLSPGK 470
|||||
RESULT 188
ADM72027
ID   ADM72027 standard; protein; 470 AA.
XX
AC   ADM72027;
XX
DT   03-JUN-2004 (first entry)
XX
DE   Chimeric mouse-human antibody M1E07 heavy chain.
XX
KW   GPC3; glypican 3; anti-GPC3 antibody; cell disruption; anti-cancer;
KW   cytotstatic; M1E07.
XX
OS   Mus sp.
OS   Homo sapiens.
OS   Chimeric.
XX
PN   WO2004022739-A1.
XX
PD   18-MAR-2004.
XX
PF   04-SEP-2003; 2003WO-JP011318.
XX
PR   04-SEP-2002; 2002WO-JP008999.
XX
PA   (CHUS ) CHUGAI SEIVAKU KK.
XX
PI   Aburatani H, Midorikawa Y, Nakano K, Ohizumi I, Ito Y, Tokita S;
XX
DR   WPI; 2004-269573/25.
DR   N-PSDB; ADM72026.
XX
PT   Antibody against the N terminus of glypican 3(GPC3) causes cell
PT   disruption and is useful as an anticancer agent.
XX
PS   Example 4; SEQ ID NO 12; 122pp; Japanese.
XX
CC   The invention relates to an antibody against the N terminus of glypican 3
CC   (GPC3). The antibody can be used for causing cell disruption and can be
CC   used as an anti-cancer agent. The present sequence represents a chimeric
CC   mouse-human antibody M1E07 heavy chain.
XX
SQ   Sequence 470 AA;

Query Match      100.0%; Score 1263; DB 8; Length 470;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy   1 EPKSCDTHTCPPCAPPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
Db   239 EPKSCDTHTCPPCAPPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 298

Qy   61 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db   299 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 358

Qy   121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180
Db   359 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 418

Qy   181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTKSLSPGK 232
Db   419 PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTKSLSPGK 470

RESULT 189
ADM72031
ID   ADM72031 standard; protein; 470 AA.
XX
```

```
AC   ADM72031;
XX
DT   03-JUN-2004 (first entry)
XX
DE   Chimeric mouse-human antibody M18D04 heavy chain.
XX
KW   GPC3; glypican 3; anti-GPC3 antibody; cell disruption; anti-cancer;
KW   cytotstatic; M18D04.
XX
OS   Mus sp.
OS   Homo sapiens.
OS   Chimeric.
XX
PN   WO2004022739-A1.
XX
PD   18-MAR-2004.
XX
PF   04-SEP-2003; 2003WO-JP011318.
XX
PR   04-SEP-2002; 2002WO-JP008999.
XX
PA   (CHUS ) CHUGAI SEIVAKU KK.
XX
PI   Aburatani H, Midorikawa Y, Nakano K, Ohizumi I, Ito Y, Tokita S;
XX
DR   WPI; 2004-269573/25.
DR   N-PSDB; ADM72030.
XX
PT   Antibody against the N terminus of glypican 3(GPC3) causes cell
PT   disruption and is useful as an anticancer agent.
XX
PS   Example 4; SEQ ID NO 16; 122pp; Japanese.
XX
CC   The invention relates to an antibody against the N terminus of glypican 3
CC   (GPC3). The antibody can be used for causing cell disruption and can be
CC   used as an anti-cancer agent. The present sequence represents a chimeric
CC   mouse-human antibody M18D04 heavy chain.
XX
SQ   Sequence 470 AA;

Query Match      100.0%; Score 1263; DB 8; Length 470;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy   1 EPKSCDTHTCPPCAPPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
Db   239 EPKSCDTHTCPPCAPPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 298

Qy   61 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db   299 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 358

Qy   121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180
Db   359 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 418

Qy   181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTKSLSPGK 232
Db   419 PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNHYTKSLSPGK 470

RESULT 190
AAV45030
ID   AAV45030 standard; protein; 471 AA.
XX
AC   AAV45030;
XX
DT   31-MAY-2000 (first entry)
XX
DE   HUMAN OCR10-Fc fusion protein.
XX
KW   Human; Orphan Cytokine Receptor-10; OCR10; chromosome 16p12; treatment;
KW   screen; cytokine; cognate ligand; endocrine disorder; immune disorder;
```

KW HUMAN OCR10-Fc fusion protein; crystallisable fragment; Fc.  
 XX Homo sapiens.  
 OS Synthetic.  
 XX

XX Key Location/Qualifiers  
 FH 1. .236  
 FT Domain /label= Extracellular domain  
 FT /note= "Corresponds to HUMAN OCR10"

XX WO200008152-A1.  
 XX 17-FEB-2000.  
 XX 16-JUL-1999; 99WO-US016060.  
 XX 04-AUG-1998; 98US-00128820.  
 XX (REGE-) REGENERON PHARM INC.  
 XX MasiaKowaki PJ, Morris J, Valenzuela DM;

XX WPI; 2000-205707/18.  
 XX N-PSDB; AAZ50747.  
 XX

XX New HUMAN orphan cytokine receptors 10 and 10-A useful for screening for  
 PT drugs e.g. receptor agonists that may mediate survival and for  
 PT differentiation in cells naturally expressing the receptor and for  
 PT screening for cognate ligands.

XX Example 6; Page 31-33; 54pp; English.

XX The present sequence is that of HUMAN OCR10-Fc fusion protein, which is  
 CC expressed as a soluble secreted protein. It comprises of extracellular  
 CC domain from HUMAN OCR10 and crystallisable fragment (Fc) region of human  
 CC immunoglobulin gamma-1 (IgG1). HUMAN OCR10-Fc DNA insert can be used to  
 CC transform host cells or for studying efficacy of drugs for diseases  
 CC associated with HUMAN OCR10 or OCR10-A polypeptide-mediated signal  
 CC transduction. HUMAN Orphan Cytokine Receptor-10 (OCR10) gene is located  
 CC on chromosome 16p12. It is expressed at high levels in spleen, thymus,  
 CC peripheral blood leucocytes and lymph nodes and moderately in heart and  
 CC placenta. It has a role in immune system and cytokine function. It is  
 CC useful in screening for cognate ligands or drugs that mediate survival  
 CC and differentiation of cells expressing this receptor. Modified HUMAN  
 CC OCR10 or its agonist can be used in the treatment of endocrine or immune  
 CC disorders  
 XX

SQ Sequence 471 AA;

Query Match 100.0%; Score 1263; DB 3; Length 471;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKHTHTCPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 240 EPKSCDKHTHTCPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVVDVSHEDPEVKF 299  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 300 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 359  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 360 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 419  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 420 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 471

RESULT 191  
 ADM05609  
 ID ADM05609 standard; protein; 471 AA.

XX  
 AC ADM05609;  
 XX  
 DT 20-MAY-2004 (first entry)  
 XX  
 DE Human protein of the invention SEQ ID NO:4294.  
 XX  
 KW human; gene therapy; diagnostic marker; pharmaceutical.  
 XX  
 OS Homo sapiens.  
 XX  
 PN EP1347046-A1.  
 XX  
 PD 24-SEP-2003.  
 XX  
 PF 12-APR-2002; 2002EP-00008400.  
 XX  
 PR 22-MAR-2002; 2002JP-00137785.  
 XX  
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.

XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;  
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;  
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;  
 XX  
 DR WPI; 2003-723558/69.  
 DR N-PSDB; ADM03166.  
 XX

XX New polynucleotides and polypeptides are useful in gene therapy, for  
 PT developing a diagnostic marker or medicines for regulating their  
 PT expression and activity, or as a target of gene therapy.

XX Claim 1; SEQ ID NO 4294; 305pp; English.

XX The invention relates to a novel human polynucleotide and the encoded  
 CC polypeptide. A polynucleotide of the invention may have a use in gene  
 CC therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful  
 CC as a primer for synthesizing the polynucleotide or as a probe for  
 CC detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are  
 CC useful in gene therapy, for developing a diagnostic marker or medicines  
 CC for regulating their expression and activity, or as a target of gene  
 CC therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides  
 CC are useful as pharmaceutical agents. The present sequence represents a  
 CC protein sequence of the invention.

XX Sequence 471 AA;

Query Match 100.0%; Score 1263; DB 7; Length 471;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKHTHTCPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 240 EPKSCDKHTHTCPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVVDVSHEDPEVKF 299  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 300 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 359  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 360 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 419  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 420 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 471

RESULT 192  
 ADM05600  
 ID ADM05600 standard; protein; 471 AA.  
 XX  
 AC ADM05600;

XX DT 20-MAY-2004 (first entry)  
XX DE Human protein of the invention SEQ ID NO:4285.  
XX KW human; gene therapy; diagnostic marker; pharmaceutical.  
XX OS Homo sapiens.  
XX PN EP1347046-A1.  
XX PD 24-SEP-2003.  
XX PF 12-APR-2002; 2002EP-00008400.  
XX PR 22-MAR-2002; 2002JP-00137785.  
XX PA (REAS-) RES ASSOC BIOTECHNOLOGY.  
XX PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;  
XX PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;  
XX PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;  
XX DR WPI: 2003-723558/69.  
XX DR N-PSDB; ADM03157.  
XX CC New polynucleotides and polypeptides are useful in gene therapy, for  
XX PT developing a diagnostic marker or medicines for regulating their  
XX PT expression and activity, or as a target of gene therapy.  
XX PS Claim 1; SEQ ID NO 4285; 305pp; English.  
XX CC The invention relates to a novel human polynucleotide and the encoded  
XX CC polypeptide. A polynucleotide of the invention ADM06202-ADM06773 is useful  
XX CC as a primer for synthesizing the polynucleotide or as a probe for  
XX CC detecting the polynucleotide. The polynucleotides ADM0316-ADM03758 are  
XX CC useful in gene therapy, for developing a diagnostic marker or medicines  
XX CC for regulating their expression and activity, or as a target of gene  
XX CC therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides  
XX CC are useful as pharmaceutical agents. The present sequence represents a  
XX CC protein sequence of the invention.  
XX SQ Sequence 471 AA;  
Query Match 100.0%; Score 1263; DB 7; Length 471;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 240 EPKSCDKHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 299  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 300 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 359  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 360 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 419  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 420 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 471  
RESULT 193  
ADM72029  
ID ADM72029 standard; protein; 471 AA.  
XX AC ADM72029;  
XX DT 03-JUN-2004 (first entry)

XX DE Chimeric mouse-human antibody M19B11 heavy chain.  
XX KW GPC3; glypican 3; anti-GPC3 antibody; cell disruption; anti-cancer;  
XX KW cytotstatic; M19B11.  
XX OS Mus sp.  
XX OS Homo sapiens.  
XX OS Chimeric.  
XX PN WO2004022739-A1.  
XX PD 18-MAR-2004.  
XX PF 04-SEP-2003; 2003WO-JP011318.  
XX PR 04-SEP-2002; 2002WO-JP008999.  
XX PA (CHUS ) CHUGAI SEIYAKU KK.  
XX PI Aburatani H, Midorikawa Y, Nakano K, Ohizumi I, Ito Y, Tokita S;  
XX PI WPI: 2004-269573/25.  
XX DR N-PSDB; ADM72028.  
XX CC Antibody against the N terminus of glypican 3 (GPC3) causes cell  
XX PT disruption and is useful as an anticancer agent.  
XX PS Example 4; SEQ ID NO 14; 122pp; Japanese.  
XX CC The invention relates to an antibody against the N terminus of glypican 3  
XX CC (GPC3). The antibody can be used for causing cell disruption and can be  
XX CC used as an anti-cancer agent. The present sequence represents a chimeric  
XX CC mouse-human antibody M19B11 heavy chain.  
XX SQ Sequence 471 AA;  
Query Match 100.0%; Score 1263; DB 8; Length 471;  
Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 240 EPKSCDKHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 299  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 300 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 359  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 360 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 419  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 420 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 471  
RESULT 194  
ADR09218  
ID ADR09218 standard; protein; 471 AA.  
XX AC ADR09218;  
XX DT 04-NOV-2004 (first entry)  
XX CC Human protein useful for treating neurological disease Seq 2724.  
XX KW human; oligo-capping method; diagnostic marker; gene therapy;  
XX KW osteoporosis; neurological disease; Alzheimer's disease;  
XX KW Parkinson's disease; dementia; short memory; cancer;  
XX KW sense or motor function; emotional reaction; fear response; panic;  
XX KW osteopathic; neuroprotective; nootropic; antiparkinsonian; cytotstatic;

KW tranquiliser.  
 XX Homo sapiens.  
 OS  
 PN EP1447413-A2.  
 XX  
 XX 18-AUG-2004.  
 PD  
 XX  
 XX 12-FEB-2004; 2004EP-00003145.  
 XX  
 XX 14-FEB-2003; 2003JP-00102207.  
 PR  
 PR 09-MAY-2003; 2003JP-00131452.  
 XX  
 XX (REAS-) RES ASSOC BIOTECHNOLOGY.  
 PA  
 XX Isogai T, Yamamoto J, Nishikawa T, Isono Y, Sugiyama T, Otsuki T;  
 PI Wakamatsu A, Ishii S, Nagai K, Irie R;  
 FI  
 XX  
 DR N-PSDB; ADR07262.  
 DR  
 XX  
 XX  
 XX New 1995 cDNA, useful for treating osteoporosis, neurological diseases,  
 PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.  
 FT  
 XX  
 XX Claim 1; SEQ ID NO 2724; 2686pp; English.  
 PS  
 XX  
 XX This invention relates to novel, isolated full length human cDNA  
 CC molecules and the encoded proteins thereof. Specifically, it refers to  
 CC cDNA clones obtained by an oligo-capping method, where none of these  
 CC clones are identical to any known human mRNAs. The present invention  
 CC describes an immunoassay to identify agonists and antagonists, as well as  
 CC antibodies, antisense molecules and siRNAs that can all be used to bind  
 CC to and modulate expression of the cDNA molecules. As such, these  
 CC molecules are useful for diagnostic markers or therapeutic targets for  
 CC the various diseases or morbid states. In particular, they are useful in  
 CC gene therapy for treating osteoporosis, neurological disease, Alzheimer's  
 CC disease, Parkinson's disease, dementia, short memory and various cancers,  
 CC as well as for maintaining equilibrium of sense or motor function, and  
 CC for treating emotional reaction, fear response and panic. Accordingly,  
 CC they exhibit osteopathic, neuroprotective, neurotropic, antiparkinsonian,  
 CC cytotatic and tranquiliser activities. This polypeptide is a protein  
 CC encoded by a full length human cDNA sequence of the invention. NOTE: This  
 CC sequence is not given in the sequence listing of the specification but  
 CC can be obtained on CD-ROM from the European Patent Office, Vienna Sub-  
 CC office.  
 CC  
 XX  
 SQ Sequence 471 AA;

Query Match 100.0%; Score 1263; DB 8; Length 471;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPELLGSPVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 240 EPKSCDKTHTCPPCPAPELLGSPVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 299  
 QY 61 NWTVGDVEVHNATKPREQYNSTYRVSVLTIVLHODWLNKGEYKCKVSNKALPAPIETK 120  
 DB 300 NWTVGDVEVHNATKPREQYNSTYRVSVLTIVLHODWLNKGEYKCKVSNKALPAPIETK 359  
 QY 121 ISKAKQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTPP 180  
 DB 360 ISKAKQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTPP 419  
 QY 181 PVLDSGGSFPLYSKLTVDKSRWQQGNVFCVSNVHEALHNHYTQKSLSLSPGK 232  
 DB 420 PVLDSGGSFPLYSKLTVDKSRWQQGNVFCVSNVHEALHNHYTQKSLSLSPGK 471

RESULT 195  
 ABP58289  
 ID ABP58289 standard; protein; 472 AA.  
 XX

AC ABP58289;  
 XX 23-OCT-2003 (revised)  
 DT 31-MAR-2003 (first entry)  
 XX  
 XX Humanised 10D5 antibody heavy chain.  
 XX  
 KW Monoclonal antibody; 10D5; complementarity determining region; CDR;  
 KW mouse; human; humanised antibody; antibody; Alzheimer's disease;  
 KW Down's syndrome; cerebral amyloid angiopathy; neuroprotective; neurotropic.  
 XX  
 OS Mus sp.  
 OS Homo sapiens.  
 OS Chimeric.  
 XX  
 XX  
 FH Key Location/Qualifiers  
 FT Peptide 1..19  
 FT /label= Signal\_peptide  
 FT Peptide 20..472  
 FT /label= Mature\_protein  
 FT /note= "the mature light chain is claimed in Claim 5"  
 FT Region 20..142  
 FT /note= "light chain variable region, claimed in Claim 4"  
 FT Region 50..56  
 FT /note= "CDR1"  
 FT Region 71..86  
 FT /note= "CDR2"  
 FT Region 119..131  
 FT /note= "CDR3"  
 WO200288307-A2.  
 07-NOV-2002.  
 26-APR-2002; 2002WO-US011854.  
 30-APR-2001; 2001US-0287653P.  
 (ELIL) LILLY & CO BLI.  
 Hinton PR, Vasquez M;  
 WPI; 2003-183836/18.  
 N-PSDB; ABZ24639, ABZ24641.  
 New humanized 10D5 antibody, useful for the manufacture of a medicament  
 for treating Down's syndrome, clinical or pre-clinical Alzheimer's  
 disease or cerebral amyloid angiopathy.  
 Disclosure; Page 13-15; 52pp; English.  
 The present sequence is the protein sequence of the heavy chain of a  
 humanised antibody of the present invention. In the variable portion, the  
 complementarity determining regions (CDRs) originate from murine  
 monoclonal antibody 10D5 and the framework region originates from human  
 germline VH segment DP-28 and J segment JH4. Novel humanised antibodies  
 of the invention have CDRs from 10D5 and human framework sequences. These  
 humanised antibodies have binding affinities (affinity and epitope  
 location) approximately the same as those of the mouse 10D5 antibody. The  
 invention includes antibodies, single chain antibodies, and their  
 fragments, as well as nucleotide sequences, vectors, transformed host  
 cells, and methods of using the humanised antibody to treat, prevent,  
 alleviate, reverse or otherwise ameliorate symptoms and/or pathology  
 associated with Down's syndrome, (pre-)clinical Alzheimer's disease or  
 (pre-)clinical cerebral amyloid angiopathy, and to inhibit formation or  
 reduce Abeta plaque in the brain. (Updated on 23-OCT-2003 to standardise  
 OS field)  
 XX  
 SQ Sequence 472 AA;

Query Match 100.0%; Score 1263; DB 6; Length 472;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDTHTCPPCAPPELLGGPSVFLFPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 241 EPKSCDTHTCPPCAPPELLGGPSVFLFPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 300  
 QY 61 NWYVDGVEVHNATKPREBOYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 301 NWYVDGVEVHNATKPREBOYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 360  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 361 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 420  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 232  
 DB 421 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 472

RESULT 196  
 ADM05388  
 ID ADM05388 standard; protein; 472 AA.  
 XX  
 AC ADM05388;  
 XX  
 DT 20-MAY-2004 (first entry)  
 XX  
 DE Human protein of the invention SEQ ID NO:4073.  
 XX  
 KW human; gene therapy; diagnostic marker; pharmaceutical.  
 XX  
 OS Homo sapiens.  
 XX  
 PN EP1347046-A1.  
 XX  
 PD 24-SEP-2003;  
 XX  
 PF 12-APR-2002; 2002EP-00008400.  
 XX  
 PR 22-MAR-2002; 2002JP-00137785.  
 XX  
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.

XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;  
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;  
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;  
 XX WPI; 2003-723558/69.  
 DR N-PSDB; ADM02945.  
 XX  
 PT New polynucleotides and polypeptides are useful in gene therapy, for  
 PT developing a diagnostic marker or medicines for regulating their  
 PT expression and activity, or as a target of gene therapy.  
 XX  
 PS Claim 1; SEQ ID NO 4073; 305pp; English.

XX The invention relates to a novel human polynucleotide and the encoded  
 CC polypeptide. A polynucleotide of the invention may have a use in gene  
 CC therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful  
 CC as a primer for synthesizing the polynucleotide or as a probe for  
 CC detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are  
 CC useful in gene therapy, for developing a diagnostic marker or medicines  
 CC for regulating their expression and activity, or as a target of gene  
 CC therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides  
 CC are useful as pharmaceutical agents. The present sequence represents a  
 CC protein sequence of the invention.

SQ Sequence 472 AA;  
 Query Match 100.0%; Score 1263; DB 7; Length 472;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDTHTCPPCAPPELLGGPSVFLFPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

DB 241 EPKSCDTHTCPPCAPPELLGGPSVFLFPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 300  
 QY 61 NWYVDGVEVHNATKPREBOYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 301 NWYVDGVEVHNATKPREBOYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 360  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 361 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 420  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 232  
 DB 421 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 472

RESULT 197  
 ADQ66377  
 ID ADQ66377 standard; protein; 472 AA.  
 XX  
 AC ADQ66377;  
 XX  
 DT 07-OCT-2004 (first entry)  
 XX  
 DE Novel human protein sequence #1350.  
 XX  
 KW osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;  
 KW gene therapy; diagnostic marker; morbid state; osteoporosis;  
 KW neurological disease; Alzheimer's disease; Parkinson's disease; dementia;  
 KW cancer.  
 XX  
 OS Homo sapiens.  
 XX  
 PN EP1440981-A2.  
 XX  
 PD 28-JUL-2004.  
 XX  
 PF 21-JAN-2004; 2004EP-00001196.  
 XX  
 PR 21-JAN-2003; 2003JP-00102206.  
 PR 09-MAY-2003; 2003JP-00131392.  
 XX

(REAS-) RES ASSOC BIOTECHNOLOGY.  
 XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;  
 PI Yamamoto J, Isono Y, Nagai K, Irie R;  
 XX WPI; 2004-535376/52.  
 DR N-PSDB; ADQ64189.  
 XX  
 PT Novel 2495 cDNA, useful for treating osteoporosis, neurological diseases,  
 PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.  
 XX  
 PS Claim 1; SEQ ID NO 3538; 2449pp; English.

XX The invention relates to 2495 novel polynucleotides (I) and their encoded  
 CC polypeptides, sequences hybridizing to these nucleotides, sequences  
 CC encoding partial polypeptides and sequences having 70% or 90% identity to  
 CC the nucleotide and protein sequences. The nucleotides and polypeptides  
 CC are useful as diagnostic markers or therapeutic target for the diseases  
 CC or morbid states. They are also useful for treating osteoporosis,  
 CC neurological diseases, Alzheimer's diseases, Parkinson's diseases,  
 CC dementia and various cancers. This sequence corresponds to a protein  
 CC sequence of the invention.

SQ Sequence 472 AA;  
 Query Match 100.0%; Score 1263; DB 8; Length 472;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDTHTCPPCAPPELLGGPSVFLFPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

Db 241 EPKSCDKTHCTCPAPPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 300  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 301 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 360  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 180  
 Db 361 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 420  
 QY 181 PVLDSGDFLYSKLTVDKSRWQQGNVFCVSNVMEALHNHYTQKSLSLSPGK 232  
 Db 421 PVLDSGDFLYSKLTVDKSRWQQGNVFCVSNVMEALHNHYTQKSLSLSPGK 472

RESULT 198  
 ADS88783  
 ID ADS88783 standard; protein; 472 AA.  
 XX  
 AC ADS88783;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Sequence of the chimeric IC2 heavy chain in M13mp19 clone M609.  
 XX  
 KW G glycoprotein; respiratory syncytial virus;  
 KW respiratory syncytial virus infection; RSV; RSV infection; IC2; IgG1;  
 KW chimeric.  
 XX  
 OS Mus sp.  
 OS Homo sapiens.  
 OS Chimeric.  
 XX  
 FH Key Location/Qualifiers  
 FT Peptide  
 FT 1. .19  
 FT /note= "Ig leader sequence"  
 XX  
 WO2004083373-A2.  
 XX  
 PD 30-SEP-2004.  
 XX  
 PF 22-MAR-2004; 2004WO-GB001239.  
 XX  
 PR 22-MAR-2003; 2003GB-00006618.  
 XX  
 PA (UYNE-) UNIV NEWCASTLE-UPON-TYNE.  
 XX  
 PI Toms G, Routledge E, Mekseepralarad C;  
 XX  
 DR WPI; 2004-691033/67.  
 DR N-PSDB; ADS88782.  
 XX  
 PT New antibody against the G glycoprotein of RSV with a variable region  
 PT having a first and second domain from a VL and VH region, respectively,  
 PT useful for treating respiratory syncytial virus (RSV) infections.  
 XX  
 PS Example 4; SEQ ID NO 51; 93pp; English.  
 XX  
 CC The specification describes an against the G glycoprotein of respiratory  
 CC syncytial virus, with a variable region comprising a first domain from a  
 CC variable light chain region and a second domain a variable heavy chain  
 CC region. The antibodies of the invention are useful for treating and  
 CC preventing the development of infections caused by the respiratory  
 CC syncytial virus (RSV). The present sequence represents the chimeric IC2  
 CC heavy chain carried by M13mp19 clone M609. IC2 is a murine monoclonal  
 CC antibody known to bind to the RSV G glycoprotein. The above clone carries  
 CC a mouse-human IgG1 chimeric antibody comprising IC2 variable regions and  
 CC human kappa light chain and gamma heavy chain constant regions.  
 XX  
 SQ Sequence 472 AA;

Query Match 100.0%; Score 1263; DB 8; Length 472;  
 Best Local Similarity 100.0%; Pred. No. 3.5e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPAPPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
 Db 241 EPKSCDKTHCTCPAPPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 300  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 Db 301 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 360  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 180  
 Db 361 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTP 420  
 QY 181 PVLDSGDFLYSKLTVDKSRWQQGNVFCVSNVMEALHNHYTQKSLSLSPGK 232  
 Db 421 PVLDSGDFLYSKLTVDKSRWQQGNVFCVSNVMEALHNHYTQKSLSLSPGK 472  
 RESULT 199  
 AAG64475  
 ID AAG64475 standard; protein; 473 AA.  
 XX  
 AC AAG64475;  
 XX  
 DT 25-SEP-2001 (first entry)  
 XX  
 DE Human type anti-human IgE antibody H chain 4.  
 XX  
 KW Human; anti-human IgE antibody; immunoglobulin; treating;  
 KW allergic disease.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200151507-A1.  
 XX  
 PD 19-JUL-2001.  
 XX  
 PF 15-JAN-2001; 2001WO-JP0000181.  
 XX  
 PR 14-JAN-2000; 2000JP-00007061.  
 XX  
 PA (SNOW) SNOW BRAND MILK PROD CO LTD.  
 XX  
 PI Washida N, Takahashi K, Satake T, Fujise N, Tanaka H, Kuriyama M;  
 XX  
 DR WPI; 2001-442132/47.  
 DR N-PSDB; AAH47903.  
 XX  
 PT New peptide used for screening human anti-human immunoglobulin E  
 PT monoclonal antibody useful in medical compositions for treating  
 PT allergies.  
 XX  
 PS Example 6; Page 62-63; 70pp; Japanese.  
 XX  
 CC The present sequence is that of a human type anti-human IgE antibody H  
 CC chain. The invention relates to a peptide useful in a method for  
 CC screening for human type anti-human IgE monoclonal antibodies (AAH47897-  
 CC AAH47904 encoding AAG64469-AAG64476) useful for preventing and/or  
 CC treating allergic disease  
 XX  
 SQ Sequence 473 AA;  
 Query Match 100.0%; Score 1263; DB 4; Length 473;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPAPPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
 Db 242 EPKSCDKTHCTCPAPPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 301  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Db 302 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 361  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 421  
QY 181 PVLDSGSGFPLYSKLTVDKSRWQQGNVFSCSVMEALHNHHTQKSLSPGK 232  
Db 422 PVLDSGSGFPLYSKLTVDKSRWQQGNVFSCSVMEALHNHHTQKSLSPGK 473  
RESULT 200  
AAG64471  
ID AAG64471 standard; protein; 473 AA.  
XX AC AAG64471;  
XX DT 25-SEP-2001 (first entry)  
XX Human type antihuman IgE antibody H chain 2.  
XX DE  
XX KW Human; antihuman IgE antibody; immunoglobulin; treating;  
XX KW allergic disease.  
XX OS Homo sapiens.  
XX PN WO200151507-A1.  
XX PD 19-JUL-2001.  
XX PF 15-JAN-2001; 2001WO-JP000181.  
XX PR 14-JAN-2000; 2000JP-00007061.  
XX PA (SNOW ) SNOW BRAND MILK PROD CO LTD.  
XX PI Washida N, Takahashi K, Satake T, Fujise N, Tanaka H, Kuriyama M;  
XX DR WPI; 2001-442132/47.  
XX DR N-PSDB; AAH47899, AAH47900.  
XX PT New peptide used for screening human anti-human immunoglobulin E  
PT monoclonal antibody useful in medical compositions for treating  
PT allergies.  
XX PS Example 6; Page 56-58; 70pp; Japanese.  
XX CC The present sequence is that of a human type antihuman IgE antibody H  
CC chain. The invention relates to a peptide useful in a method for  
CC screening for human type antihuman IgE monoclonal antibodies (AAH47897-  
CC AAH47904 encoding AAG64469-AAG64476) useful for preventing and/or  
CC treating allergic disease  
XX SQ Sequence 473 AA;  
Query Match 100.0%; Score 1263; DB 4; Length 473;  
Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 242 EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 301  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 302 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 361  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 421  
181 PVLDSGSGFPLYSKLTVDKSRWQQGNVFSCSVMEALHNHHTQKSLSPGK 232

Db 422 PVLDSGSGFPLYSKLTVDKSRWQQGNVFSCSVMEALHNHHTQKSLSPGK 473  
RESULT 201  
AAG64469  
ID AAG64469 standard; protein; 473 AA.  
XX AC AAG64469;  
XX DT 25-SEP-2001 (first entry)  
XX Human type antihuman IgE antibody H chain 1.  
XX DE  
XX KW Human; antihuman IgE antibody; immunoglobulin; treating;  
XX KW allergic disease.  
XX OS Homo sapiens.  
XX PN WO200151507-A1.  
XX PD 19-JUL-2001.  
XX PF 15-JAN-2001; 2001WO-JP000181.  
XX PR 14-JAN-2000; 2000JP-00007061.  
XX PA (SNOW ) SNOW BRAND MILK PROD CO LTD.  
XX PI Washida N, Takahashi K, Satake T, Fujise N, Tanaka H, Kuriyama M;  
XX DR WPI; 2001-442132/47.  
XX DR N-PSDB; AAH47897.  
XX PT New peptide used for screening human anti-human immunoglobulin E  
PT monoclonal antibody useful in medical compositions for treating  
PT allergies.  
XX PS Example 6; Page 53-55; 70pp; Japanese.  
XX CC The present sequence is that of a human type antihuman IgE antibody H  
CC chain. The invention relates to a peptide useful in a method for  
CC screening for human type antihuman IgE monoclonal antibodies (AAH47897-  
CC AAH47904 encoding AAG64469-AAG64476) useful for preventing and/or  
CC treating allergic disease  
XX SQ Sequence 473 AA;  
Query Match 100.0%; Score 1263; DB 4; Length 473;  
Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 242 EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 301  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 302 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 361  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 421  
181 PVLDSGSGFPLYSKLTVDKSRWQQGNVFSCSVMEALHNHHTQKSLSPGK 232  
422 PVLDSGSGFPLYSKLTVDKSRWQQGNVFSCSVMEALHNHHTQKSLSPGK 473  
RESULT 202  
AAG64473  
ID AAG64473 standard; protein; 473 AA.  
XX AC AAG64473;

XX 25-SEP-2001 (first entry)  
 XX Human type antihuman IgE antibody H chain 3.  
 DE Human, antihuman IgB antibody; immunoglobulin; treating;  
 XX allergic disease.  
 KW Homo sapiens.  
 XX  
 OS  
 XX  
 XX Key Location/Qualifiers  
 FT Misc-difference 22 /note= "Encoded by CAG"  
 FT Misc-difference 129..141  
 FT /note= "Encoded by ccgtggggcc agggaaacacc ggtgccttt  
 FT gactacgtc"  
 XX  
 PN WO200151507-A1.  
 XX  
 XX 19-JUL-2001.  
 XX  
 XX 15-JAN-2001; 2001WO-JP000181.  
 XX  
 XX 14-JAN-2000; 2000JP-00007061.  
 XX  
 XX (SNOW ) SNOW BRAND MILK PROD CO LTD.  
 XX  
 XX Washida N, Takahashi K, Satake T, Fujise N, Tanaka H, Kuriyama M;  
 XX WPI; 2001-442132/47.  
 DR N-PSDB; AAH47901.  
 XX  
 XX New peptide used for screening human anti-human immunoglobulin E  
 PT monoclonal antibody useful in medical compositions for treating  
 PT allergies.  
 XX  
 XX Example 6; Page 59-60; 70pp; Japanese.  
 XX  
 CC The present sequence is that of a human type antihuman IgE antibody H  
 CC chain. The invention relates to a peptide useful in a method for  
 CC screening for human type antihuman IgE monoclonal antibodies (AAH47897-  
 CC AAH47904 encoding AAG64469-AAG64476) useful for preventing and/or  
 CC treating allergic disease  
 XX  
 SQ Sequence 473 AA;  
 Query Match 100.0%; Score 1263; DB 4; Length 473;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
 Db 242 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 301  
 QY 61 NWYVDGVEVHNATKPREEQNSTYRVVSVLTIVLHODWLNKGEYCKVSNKALPAPIEKT 120  
 Db 302 NWYVDGVEVHNATKPREEQNSTYRVVSVLTIVLHODWLNKGEYCKVSNKALPAPIEKT 361  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 Db 362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 421  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232  
 Db 422 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 473  
 RESULT 203  
 ADM05599  
 ID ADM05599 standard; protein; 473 AA.  
 XX  
 AC ADM05599;  
 XX

DT 20-MAY-2004 (first entry)  
 XX Human protein of the invention SEQ ID NO:4284.  
 DE human; gene therapy; diagnostic marker; pharmaceutical.  
 KW Homo sapiens.  
 XX  
 OS  
 XX  
 XX EP1347046-A1.  
 XX  
 XX 24-SEP-2003.  
 XX  
 XX 12-APR-2002; 2002EP-00008400.  
 XX  
 XX 22-MAR-2002; 2002JP-00137785.  
 XX  
 XX (REAS-) RES ASSOC BIOTECHNOLOGY.  
 XX  
 XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;  
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;  
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;  
 XX WPI; 2003-723558/69.  
 DR N-PSDB; ADM03156.  
 XX  
 XX New polynucleotides and polypeptides are useful in gene therapy, for  
 PT developing a diagnostic marker or medicines for regulating their  
 PT expression and activity, or as a target of gene therapy.  
 XX  
 PS Claim 1; SEQ ID NO 4284; 305pp; English.  
 XX  
 CC The invention relates to a novel human polynucleotide and the encoded  
 CC polypeptide. A polynucleotide of the invention may have a use in gene  
 CC therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful  
 CC as a primer for synthesizing the polynucleotide or as a probe for  
 CC detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are  
 CC useful in gene therapy, for developing a diagnostic marker or medicines  
 CC for regulating their expression and activity, or as a target of gene  
 CC therapy. The proteins ADM01759-ADM06201 encoded by the polynucleotides  
 CC are useful as pharmaceutical agents. The present sequence represents a  
 CC protein sequence of the invention.  
 XX  
 SQ Sequence 473 AA;  
 Query Match 100.0%; Score 1263; DB 7; Length 473;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
 Db 242 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 301  
 QY 61 NWYVDGVEVHNATKPREEQNSTYRVVSVLTIVLHODWLNKGEYCKVSNKALPAPIEKT 120  
 Db 302 NWYVDGVEVHNATKPREEQNSTYRVVSVLTIVLHODWLNKGEYCKVSNKALPAPIEKT 361  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 Db 362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 421  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232  
 Db 422 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 473  
 RESULT 204  
 ADM97513  
 ID ADM97513 standard; protein; 473 AA.  
 XX  
 AC ADM97513;  
 XX  
 DT 01-JUL-2004 (first entry)  
 XX

DE CD1d-IgG-B2M complex IgG1-beta2-microglobulin SEQ ID NO: 36.  
 KW Cld complex; cytostatic; antiinflammatory; cancer; autoimmune disease;  
 KW inflammatory disease; immunosuppressive; antimicrobial; neuroprotective;  
 KW antidiabetic; antiarthritic; antirheumatic; ophthalmological;  
 KW gastrointestinal; nephrotropic; dermatological; hepatotropic;  
 KW beta2-microglobulin.  
 XX Synthetic.  
 OS Unidentified.  
 XX  
 XX Key Location/Qualifiers  
 FH Misc-difference 421  
 FT /note= "encoded by TCT"  
 XX  
 XX WO2004029206-A2.  
 XX  
 XX 08-APR-2004.  
 XX  
 XX 26-SEP-2003; 2003WO-US030238.  
 XX  
 XX 27-SEP-2002; 2002EP-00405838.  
 XX  
 XX (VACC-) VACCINEX INC.  
 PA (ROBE/) ROBERT B.  
 PA (DOND/) DONDA A.  
 PA (CESS/) CESSON V.  
 PA (MACH/) MACH J.  
 XX  
 XX Robert B, Donda A, Cesson V, Mach J, Zauderer M;  
 XX WPI; 2004-316095/29.  
 DR N-PSDB; ADM97512.  
 XX  
 XX New compound comprising Cld complexes and an antibody specific for a  
 PT cell surface marker, useful for preventing or treating tumors and  
 PT autoimmune/inflammatory or infectious diseases, e.g. multiple sclerosis,  
 PT diabetes or psoriasis.  
 XX  
 XX Example 10; Page 89; 152pp; English.  
 PS  
 XX The present invention relates to a compound comprising one or more Cld  
 CC complexes and an antibody or its fragment specific for a cell surface  
 CC marker. The Cld complexes comprise a Cld and a beta2-microglobulin  
 CC molecule, and are linked to the antibody or its fragment. The composition  
 CC and methods are useful for preventing or treating tumors and  
 CC autoimmune/inflammatory or infectious diseases, such as multiple  
 CC sclerosis, type I diabetes, ankylosing spondylitis, acute anterior  
 CC uveitis, atrophic gastritis, Goodpasture's syndrome, Grave's disease,  
 CC Hashimoto's thyroiditis, myasthenia gravis, psoriasis, psoriatic  
 CC arthritis, rheumatoid arthritis, systemic lupus erythematosus, systemic  
 CC sclerosis, pemphigus vulgaris, pernicious anemia, primary biliary  
 CC cirrhosis, ulcerative colitis or autoimmune hepatitis. The present  
 CC sequence is a polypeptide used in the exemplification of the invention.  
 XX  
 SQ Sequence 473 AA;  
 Query Match 100.0%; Score 1263; DB 8; Length 473;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 123 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 182  
 QY 61 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTCLVKGFPSPDI AVEVESNQPPNNYKTP 120  
 DB 183 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTCLVKGFPSPDI AVEVESNQPPNNYKTP 242  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPSPDI AVEVESNQPPNNYKTP 180  
 DB 243 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPSPDI AVEVESNQPPNNYKTP 302

QY 181 PVLDSDGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTKSLSPGK 232  
 DB 303 PVLDSDGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTKSLSPGK 354  
 RESULT 205  
 ADM05597  
 ID ADM05597 standard; protein; 474 AA.  
 XX  
 XX ADM05597;  
 XX  
 XX 20-MAY-2004 (first entry)  
 XX  
 XX Human protein of the invention SEQ ID NO:4282.  
 XX  
 XX human; gene therapy; diagnostic marker; pharmaceutical.  
 XX  
 XX Homo sapiens.  
 XX  
 XX EP1347046-A1.  
 XX  
 XX 24-SEP-2003.  
 XX  
 XX 12-APR-2002; 2002EP-00008400.  
 XX  
 XX 22-MAR-2002; 2002JP-00137785.  
 XX  
 XX (REAS-) RES ASSOC BIOTECHNOLOGY.  
 XX  
 XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;  
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;  
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;  
 XX  
 XX WPI; 2003-723558/69.  
 DR N-PSDB; ADM031154.  
 XX  
 XX New polynucleotides and polypeptides are useful in gene therapy, for  
 PT developing a diagnostic marker or medicines for regulating their  
 PT expression and activity, or as a target of gene therapy.  
 XX  
 XX Claim 1; SEQ ID NO 4282; 305pp; English.  
 PS  
 XX The invention relates to a novel human polynucleotide and the encoded  
 CC polypeptide. A polynucleotide of the invention may have a use in gene  
 CC therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful  
 CC as a primer for synthesizing the polynucleotide or as a probe for  
 CC detecting the polynucleotide. The polynucleotide ADM03116-ADM03758 are  
 CC useful in gene therapy, for developing a diagnostic marker or medicines  
 CC for regulating their expression and activity, or as a target of gene  
 CC therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides  
 CC are useful as pharmaceutical agents. The present sequence represents a  
 CC protein sequence of the invention.  
 XX  
 SQ Sequence 474 AA;  
 Query Match 100.0%; Score 1363; DB 7; Length 474;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 243 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 302  
 QY 61 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTCLVKGFPSPDI AVEVESNQPPNNYKTP 120  
 DB 303 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTCLVKGFPSPDI AVEVESNQPPNNYKTP 362  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPSPDI AVEVESNQPPNNYKTP 180  
 DB 363 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPSPDI AVEVESNQPPNNYKTP 422  
 QY 181 PVLDSDGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTKSLSPGK 232

Db 423 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTKQSLSPGK 474

RESULT 206

AAR20057

ID AAR20057 standard; protein; 475 AA.

XX

AC AAR20057;

XX

DT 25-MAR-1992 (first entry)

XX

DE Heavy chain of 3D6 anti-HIV antibody.

XX

KW Plasmid pUC3D6HC; human immunodeficiency virus; AIDS;

KW complementarity determining region.

XX

OS Homo sapiens.

XX

Key Location/Qualifiers

FT Peptide 1..19

FT /label= signal

FT Region 20..49

FT /label= Framework\_1

FT Region 50..54

FT /label= CDR-1

FT Region 55..68

FT /label= Framework\_2

FT Region 69..85

FT /label= CDR\_2

FT Region 86..117

FT /label= Framework\_3

FT Region 118..134

FT /label= CDR\_3

FT Region 135..145

FT /label= Framework\_4

FT Region 146..475

FT /label= Constant\_region

XX

PN WO118983-A.

XX

PD 12-DEC-1991.

XX

PF 29-MAY-1990; 90AT-00001178.

XX

PR 29-MAY-1990; 90AT-00001178.

XX

PA (JUNG/) JUNGBAUER A.

XX

PI Felgenhaue M, Himmeler G, Kohl J, Steindl F;

XX

DR WPI; 1992-007468/01.

DR N-PSDB; AAQ20066.

XX

Recombinant protein which binds to complex viral antigen and HIV-1 - contains variable region of antibody derived from 3D6 cell line, used for detecting HIV-1 antigen.

XX

PS Claim 2; Page 24; 52pp; German.

XX

The variable region of the heavy chain is used in a recombinant protein with the variable region from the kappa light chain of 3D6, the two V regions being joined by a linker. The recombinant protein binds to HIV gp160. See also AAQ20067 and AAQ20068

XX

SQ Sequence 475 AA;

Query Match 100.0%; Score 1263; DB 2; Length 475;

Best Local Similarity 100.0%; Pred. No. 3.6e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Db 244 EPKSCDKTHTCPCPAPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVTLHODWMLNGKEYCKVSNKALPAPIEKT 120

Db 304 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVTLHODWMLNGKEYCKVSNKALPAPIEKT 363

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTPP 180

Db 364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTPP 423

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTKQSLSPGK 232

Db 424 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTKQSLSPGK 475

RESULT 207

AAR93553

ID AAR93553 standard; protein; 475 AA.

XX

AC AAR93553;

XX

DT 20-AUG-1996 (first entry)

XX

DE Monoclonal antibody DNA heavy chain against 65 kD hCMV antigen.

XX

KW Polymerase chain reaction; primer; amplify; PCR; light chain; Mab;

KW 65 kD antigen; human cytomegalovirus; hCMV; heavy chain; diagnosis.

XX

OS Synthetic.

XX

Key Location/Qualifiers

FT Peptide 1..19

FT /note= "Signal peptide"

FT Protein 20..475

FT /note= "Mature heavy chain"

XX

PN JP08038178-A.

XX

PD 13-FEB-1996.

XX

PF 20-FEB-1995; 95JP-00030742.

XX

PR 18-FEB-1994; 94JP-00021628.

XX

PA (TANA/) TANAKA H.

PA (NISN ) NISSHINO IND INC.

XX

DR WPI; 1996-154852/16.

DR N-PSDB; AAT18059.

XX

PT Human monoclonal antibody binds to cytomegalovirus 65 kD antigen - produced by primer amplification, used in the diagnosis of hCMV infection.

PT

XX

PS Claim 4; Page 16-18; 22pp; Japanese.

XX

The sequences given in AAR93553-54 represent the heavy and light chains respectively of a monoclonal antibody against a 65 kD antigen of human cytomegalovirus (hCMV). The DNA's encoding these sequences were amplified using the sequences given in AAR18040-58. The monoclonal antibody may be used in the diagnosis of hCMV

XX

SQ Sequence 475 AA;

Query Match 100.0%; Score 1263; DB 2; Length 475;

Best Local Similarity 100.0%; Pred. No. 3.6e-91;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Db 244 EPKSCDKTHTCPCPAPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVTLHODWMLNGKEYCKVSNKALPAPIEKT 120

```
Db 304 NWTVDGVEVHNATKPREEQYNSTYRVVSVLTCLVKGFPSPDIAVEWESNGQPENNYKTTTP 363
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 423
QY 181 PVLDSGSEFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
Db 424 PVLDSGSEFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 475

RESULT 208
AAW11641
ID AAW11641 standard; protein; 475 AA.
XX
XX AAW11641;
DT 13-MAY-1997 (first entry)
XX
XX Human anti-RSV monoclonal antibody RF-2 heavy chain.
XX
XX Monoclonal antibody; Mab; RF-1; RF-2; respiratory syncytial virus; RSV;
KW fusion protein; F-protein; vaccine; immunotherapy; therapy;
KW Epstein Barr virus; immortalisation; recombinant antibody.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FT Peptide 1..19
FT /label= Leader_peptide
FT Region 20..49
FT /label= FR1
FT /note= "framework region 1"
FT Region 50..56
FT /label= CDR1
FT /note= "complementarity determining region 1"
FT Region 57..70
FT /label= FR2
FT /note= "framework region 2"
FT Region 71..86
FT /label= CDR2
FT /note= "complementarity determining region 2"
FT Region 87..118
FT /label= FR3
FT /note= "framework region 3"
FT Region 119..134
FT /label= CDR3
FT /note= "complementarity determining region 3"
FT Region 135..145
FT /label= FR4
FT /note= "framework region 4"
FT Region 146..475
FT /label= Kappa
FT /note= "human gamma 1 constant region"
XX
XX WO9640252-A1.
XX
XX 19-DEC-1996.
XX
XX 06-JUN-1996; 96WO-US010070.
XX
XX 07-JUN-1995; 95US-00488376.
XX
XX (IDEC-) IDEC PHARM CORP.
XX
XX Brams P, Chamat SS, Pan L, Walsh EE, Heard CJ, Newman RA;
XX WPI; 1997-099892/09.
XX N-PSDB; AAT61279.
XX
XX Human monoclonal antibody specific for respiratory syncytial virus fusion
XX protein - used for the prevention and treatment of RSV infection.
XX
```

```
PS Example 6; Fig 11b-c; 85pp; English.
XX
XX A polypeptide (AAW11641) comprises a leader sequence, RF-2 heavy chain
CC variable region (see also AAW11635), and human gamma 1 constant region.
CC RF-2 is a human monoclonal antibody (hMab) specific for the fusion
CC protein of respiratory syncytial virus (RSV). The polypeptide can be
CC produced in eukaryotic host (e.g. CHO) cells transfected with vector
CC NEOSPLA incorporating a DNA construct (AAT61279) including the RF-2 VH
CC sequence. RF-1 and RF-2 heavy and light chains (see also AAW11638-40) are
CC similarly produced. The transfected host cells provide a constant, stable
CC supply of anti-RSV F-protein hMabs for use in the treatment or prevention
CC of RSV infection
XX
XX SQ Sequence 475 AA;
Query Match 100.0%; Score 1263; DB 2; Length 475;
Best Local Similarity 100.0%; Pred No. 3.6e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 EPKSCDKTHTCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 244 EPKSCDKTHTCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 303
QY 61 NMYVDGVEVHNATKPREEQYNSTYRVVSVLTCLVKGFPSPDIAVEWESNGQPENNYKTTTP 120
Db 304 NMYVDGVEVHNATKPREEQYNSTYRVVSVLTCLVKGFPSPDIAVEWESNGQPENNYKTTTP 363
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 423
QY 181 PVLDSGSEFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
Db 424 PVLDSGSEFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 475

RESULT 209
AAW11639
ID AAW11639 standard; protein; 475 AA.
XX
XX AAW11639;
DT 13-MAY-1997 (first entry)
XX
XX Human anti-RSV monoclonal antibody RF-1 heavy chain.
XX
XX Monoclonal antibody; Mab; RF-1; RF-2; respiratory syncytial virus; RSV;
KW fusion protein; F-protein; vaccine; immunotherapy; therapy;
KW Epstein Barr virus; immortalisation; recombinant antibody.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FT Peptide 1..19
FT /label= Leader_peptide
FT Region 20..49
FT /label= FR1
FT /note= "framework region 1"
FT Region 50..56
FT /label= CDR1
FT /note= "complementarity determining region 1"
FT Region 57..70
FT /label= FR2
FT /note= "framework region 2"
FT Region 71..86
FT /label= CDR2
FT /note= "complementarity determining region 2"
FT Region 87..118
FT /label= FR3
FT /note= "framework region 3"
FT Region 119..134
FT /label= CDR3
FT /note= "complementarity determining region 3"
FT
```

FT Region 135.145  
 FT /label= FR4  
 FT /note= "framework region 4"  
 FT 146.475  
 FT /label= Kappa  
 FT /note= "human gamma 1 constant region"  
 XX  
 XX WO9640252-A1.  
 XX  
 XX 19-DEC-1996.  
 XX  
 XX 06-JUN-1996; 96WO-US010070.  
 XX  
 XX 07-JUN-1995; 95US-00488376.  
 XX  
 XX (IDEC-) IDEC PHARM CORP.  
 XX  
 XX Brams P, Chamat SS, Pan L, Walsh EE, Heard CJ, Newman RA;  
 XX  
 XX WPI; 1997-099892/09.  
 XX  
 XX N-PSDB; AA761241.  
 XX  
 XX Human monoclonal antibody specific for respiratory syncytial virus fusion  
 XX protein - used for the prevention and treatment of RSV infection.  
 XX  
 XX Example 6; Fig 9b-c; 85pp; English.  
 XX  
 XX A polypeptide (AAW11639) comprises a leader sequence, RF-1 heavy chain  
 XX variable region (see also AAW11639), and human gamma 1 constant region.  
 XX CDR1 is a human monoclonal antibody (hMab) specific for the fusion protein  
 XX of respiratory syncytial virus (RSV). The polypeptide can be produced in  
 XX eukaryotic host (e.g. CHO) cells transfected with vector NEOPLA  
 XX incorporating a DNA construct (AA761241) including the RF-1 VH sequence.  
 XX RF-1 and RF-2 heavy and light chains (see also AAW1639, AAW1640-41) are  
 XX similarly produced. The transfected host cells provide a constant, stable  
 XX supply of anti-RSV F-protein hMabs for use in the treatment or prevention  
 XX of RSV infection  
 XX  
 XX Sequence 475 AA;  
 XX  
 XX Query Match 100.0%; Score 1263; DB 2; Length 475;  
 XX Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 244 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 303  
 QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 304 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363  
 QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 364 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 423  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 424 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 475  
 RESULT 210  
 AAG63640  
 ID AAG63640 standard; protein; 475 AA.  
 XX  
 XX AAG63640;  
 XX  
 XX 29-OCT-2001 (first entry)  
 XX  
 XX Amino acid sequence of a single chain antibody.  
 XX  
 XX Complementarity determining region; CDR; single chain antibody; ScFv;  
 KW hepatitis C virus; HCV; HCV infection; CD81; E2 protein; NS1 protein;  
 KW

KW envelope glycoprotein.  
 XX Homo sapiens.  
 XX WO200158459-A1.  
 XX 16-AUG-2001.  
 XX  
 XX 13-FEB-2001; 2001WO-JP000967.  
 XX  
 XX 14-FEB-2000; 2000JP-00034906.  
 XX  
 XX (MITS-) MITSUBISHI-TOKYO PHARM INC.  
 XX  
 XX Itami S, Shibui T, Seki M, Yotsumoto Y, Matsuura Y, Miyamura T;  
 XX  
 XX WPI; 2001-496986/54.  
 XX  
 XX N-PSDB; AAH74680.  
 XX  
 XX Remedies for hepatitis C containing substances with antiviral effects  
 XX e.g. antibodies, proteins, sulfated polysaccharides and low-molecular  
 XX compounds, by inhibiting binding of hepatitis C virus envelope  
 XX glycoprotein or CD81.  
 XX  
 XX Disclosure; Page 105-108; 138pp; Japanese.  
 XX  
 XX The present sequence represents a single chain antibody of the invention.  
 XX The specification describes a substance can inhibit the binding between  
 XX hepatitis C virus (HCV) and cells with potential HCV infection, cells  
 XX with expression of CD81, or CD81. This substance is especially an  
 XX antibody with affinity towards HCV E2/NS1 protein, containing amino acid  
 XX sequences based on the complementarity determining region (CDR) 1, CDR2  
 XX and CDR3 of the H and L chain variable regions. The antibody inhibits the  
 XX viral envelope glycoprotein. It is also a CD81 inhibitor. The antibodies  
 XX and drugs are used for treatment and/or prevention of hepatitis C, or for  
 XX diagnosis of hepatitis C  
 XX  
 XX Sequence 475 AA;  
 XX  
 XX Query Match 100.0%; Score 1263; DB 4; Length 475;  
 XX Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 244 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 303  
 QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 304 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363  
 QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 364 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 423  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 424 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 475  
 RESULT 211  
 ADM47075  
 ID ADM47075 standard; protein; 475 AA.  
 XX  
 XX ADM47075;  
 XX  
 XX 03-JUN-2004 (first entry)  
 XX  
 XX Mouse anti-human G-CSF antibody heavy chain protein.  
 XX  
 XX methyloctroph yeast; mammalian sugar chain; OCH1; alpha-1;  
 KW 6-mannosyl transferase; alpha-1; 2-mannosidase;  
 KW orotidin-5'-phosphate decarboxylase; URA3;

KW phosphoribosyl-amino-imidazole succinocarboxamide synthase; ADE1;  
 KW imidazole-glycerol-phosphate dehydratase; HIS3;  
 KW 3-isopropyl malate dehydrogenase; LEU2; proteinase A; proteinase B; PRB1;  
 KW PE4; YP51; KTR1; MN9; AOX; GAPDH; mannosyl transferase;  
 KW glyceraldehyde 3-phosphate dehydrogenase; mannose glycoprotein.  
 XX  
 OS Mus sp.  
 XX WO2003091431-A1.  
 XX 06-NOV-2003.  
 XX 28-APR-2003; 2003WO-JP005464.  
 XX 26-APR-2002; 2002JP-00127677.  
 XX (KIRI ) KIRIN BEER KK.  
 PA (NAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.  
 XX Kobayashi K, Kitagawa Y, Komeda T, Kawashima N, Jigami Y;  
 PI Chiba Y;  
 XX WPI; 2003-854401/79.  
 XX Producing methylotroph yeast that expresses mammalian sugar chains by  
 PT disrupting the OCH1 gene and inserting an alpha-1,2-mannosidase gene.  
 XX Example 28; SEQ ID NO 94; 247pp; Japanese.  
 XX The invention relates to the production of a methylotroph yeast that  
 CC produces mammalian sugar chains, comprising disrupting the OCH1 gene in  
 CC the yeast that encodes for alpha-1,6-mannosyl transferase and inserting  
 CC and expressing the alpha-1,2-mannosidase gene. The specification also  
 CC includes DNA sequences encoding: (a) orotidin-5'-phosphate decarboxylase  
 CC (URA3); (b) phosphoribosyl-amino-imidazole succinocarboxamide synthase  
 CC (ADE1); (c) imidazole-glycerol-phosphate dehydratase (HIS3); (d) 3-  
 CC isopropyl malate dehydrogenase (LEU2); (e) alpha-1,6-mannosyl transferase  
 CC (OCH1); (f) proteinase A (PE4); (g) proteinase B (PRB1); and (h)  
 CC aspartic protease (VPS1), mannosyl transferase (KTR1 or MN9), alcohol  
 CC oxidase (AOX) and glyceraldehyde 3-phosphate dehydrogenase (GAPDH) gene  
 CC sequences. The yeast is used for the production of human and mammalian  
 CC high mannose glycoproteins with high yield and purity. The method is also  
 CC useful for producing hybrid or complex sugar chains containing mammalian  
 CC type chains. This sequence represents a mouse anti-human G-CSF antibody  
 CC heavy chain used in the invention.  
 XX  
 SQ Sequence 475 AA;  
 Query Match 100.0%; Score 1263; DB 7; Length 475;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 244 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 303  
 QY 61 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 Db 304 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 363  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 180  
 Db 364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 423  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 Db 424 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 475  
 RESULT 212  
 ADL23053  
 ID ADL23053 standard; protein; 475 AA.  
 XX

AC ADL23053;  
 XX 20-MAY-2004 (first entry)  
 XX Mouse/human chimeric anti-MAG antibody heavy chain #2.  
 DE antibody; MAG; myelin associated glycoprotein; heavy chain; CDR; stroke;  
 KW neurodegenerative disorder; gene therapy; vaccine; human; mouse.  
 XX Homo sapiens.  
 OS Mus sp.  
 OS Chimeric.  
 XX WO2004014953-A2.  
 XX 19-FEB-2004.  
 XX 05-AUG-2003; 2003WO-EP008749.  
 XX 06-AUG-2002; 2002GB-00018229.  
 PR 06-AUG-2002; 2002GB-00018230.  
 PR 06-AUG-2002; 2002GB-00018232.  
 PR 06-AUG-2002; 2002GB-00018234.  
 XX (GLAX ) GLAXO GROUP LTD.  
 PA Ellis JH, Germaschewski V;  
 XX WPI; 2004-180641/17.  
 XX New altered antibody that binds to and neutralizes myelin associated  
 PT glycoprotein (MAG), useful for preparing a composition for treating or  
 PT preventing stroke or other neurodegenerative disorders e.g., Alzheimer's  
 PT disease.  
 XX Example 2; Fig 3; 67pp; English.  
 XX The present invention relates to a new altered antibody or its functional  
 CC fragment, which binds to and neutralizes myelin associated glycoprotein  
 CC (MAG) and comprises a light chain variable domain (VL) comprising  
 CC complementary determining region light 1 (CDRL1), CDRL2 or CDRL3 and/or a  
 CC heavy chain variable domain (VH) comprising CDRH1, CDRH2 or CDRH3. The  
 CC antibody is useful for preparing a composition for treating or preventing  
 CC stroke or other neurodegenerative disorders in a human, e.g., traumatic  
 CC brain injury, Alzheimer's disease, dementias, peripheral neuropathy,  
 CC Parkinson's disease, Huntington's disease and multiple sclerosis. The  
 CC present sequence is a human/mouse chimeric anti-MAG antibody heavy chain.  
 XX  
 SQ Sequence 475 AA;  
 Query Match 100.0%; Score 1263; DB 8; Length 475;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 244 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 303  
 QY 61 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 Db 304 NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 363  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 180  
 Db 364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTTTP 423  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 Db 424 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 475  
 RESULT 213  
 ADL23056

ID ADL23056 standard; protein; 475 AA.  
 XX AC ADL23056;  
 XX DT 20-MAY-2004 (first entry)  
 XX DE Humanised anti-MAG antibody #3.  
 XX KW antibody; MAG; myelin associated glycoprotein; stroke;  
 KW neurodegenerative disorder; gene therapy; vaccine; human.  
 XX OS Homo sapiens.  
 OS Chimeric.  
 OS Unidentified.  
 XX FN WO2004014953-A2.  
 XX PD 19-FEB-2004.  
 XX PF 05-AUG-2003; 2003WO-EP008749.  
 XX PR 06-AUG-2002; 2002GB-00018229.  
 PR 06-AUG-2002; 2002GB-00018230.  
 PR 06-AUG-2002; 2002GB-00018232.  
 PR 06-AUG-2002; 2002GB-00018234.  
 XX (GLAX ) GLAXO GROUP LTD.  
 XX PA  
 XX PI Ellis JH, Germaschewski V;  
 XX DR WPI; 2004-180641/17.  
 XX PT New altered antibody that binds to and neutralizes myelin associated  
 PT Glycoprotein (MAG), useful for preparing a composition for treating or  
 PT preventing stroke or other neurodegenerative disorders e.g., Alzheimer's  
 PT disease.  
 XX PS Example 4; Fig 5; 67pp; English.  
 XX CC The present invention relates to a new altered antibody or its functional  
 CC fragment, which binds to and neutralizes myelin associated glycoprotein  
 CC (MAG) and comprises a light chain variable domain (VL) comprising  
 CC complementary determining region light 1 (CDRL1), CDRL2 or CDRL3 and/or a  
 CC heavy chain variable domain (VH) comprising CDRL1, CDRL2 or CDRL3. The  
 CC antibody is useful for preparing a composition for treating or preventing  
 CC stroke or other neurodegenerative disorders in a human, e.g., traumatic  
 CC brain injury, Alzheimer's disease, dementias, peripheral neuropathy,  
 CC Parkinson's disease, Huntington's disease and multiple sclerosis. The  
 CC present sequence is a humanised anti-MAG antibody.  
 XX SQ Sequence 475 AA;  
 Query Match 100.0%; Score 1263; DB 8; Length 475;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKHTCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 244 EPKSCDKHTCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTIVLHODWLNGKEYCKVSNKALPAPIEKT 120  
 DB 304 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTIVLHODWLNGKEYCKVSNKALPAPIEKT 363  
 QY 121 ISKAKGQPREPOVYITLPFSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 364 ISKAKGQPREPOVYITLPFSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 423  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232  
 DB 424 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 475

RESULT 214  
 ADS88794  
 ID ADS88794 standard; protein; 475 AA.  
 XX AC ADS88794;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE A mouse/human chimeric anti-MAG antibody heavy chain.  
 XX KW oligodendrocyte; stroke; neurological disease;  
 KW myelin-associated glycoprotein; MAG; anti-MAG antibody;  
 KW Alzheimer's disease; multiple sclerosis;  
 KW chain complementarity determining region; CDR; chimera.  
 XX OS Mus sp.  
 OS Homo sapiens.  
 OS Chimeric.  
 XX PN WO2004083363-A2.  
 XX PD 30-SEP-2004.  
 XX PF 02-FEB-2004; 2004WO-EP001016.  
 XX PR 19-MAR-2003; 2003GB-00006309.  
 XX (GLAX ) GLAXO GROUP LTD.  
 XX PI Vinson M, Irving EA;  
 XX DR WPI; 2004-691029/67.  
 XX PT Promoting oligodendrocyte survival in humans with neurological diseases,  
 PT such as Alzheimer's disease, multiple sclerosis and/or stroke, using an  
 PT anti-myelin-associated glycoprotein (MAG) antibody.  
 XX PS Claim 9; SEQ ID NO 9; 45pp; English.  
 XX CC The specification describes a method for promoting oligodendrocyte  
 CC survival in a human suffering or at risk of developing stroke or another  
 CC neurological diseases. The method comprises administering to the human an  
 CC anti-myelin-associated glycoprotein (MAG) antibody or its functional  
 CC fragment. The anti-MAG antibody or its functional fragment is useful in  
 CC the manufacture of a medicament for the promotion of oligodendrocyte  
 CC survival in a human suffering from or at risk of developing stroke or  
 CC another neurological disease. They can also be used in treating  
 CC neurological diseases, such as Alzheimer's disease, multiple sclerosis  
 CC and/or stroke, by promoting oligodendrocyte survival. The present  
 CC sequence represents a mouse/human chimeric anti-MAG antibody heavy chain  
 CC in which the murine anti-MAG heavy chain variable region is associated  
 CC with a functional immunoglobulin secretion signal sequence, and with a  
 CC wild type form of the human IgG1 constant region. Antibodies used in the  
 CC method of the invention may comprise the present heavy chain.  
 XX SQ Sequence 475 AA;  
 Query Match 100.0%; Score 1263; DB 8; Length 475;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKHTCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 244 EPKSCDKHTCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTIVLHODWLNGKEYCKVSNKALPAPIEKT 120  
 DB 304 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTIVLHODWLNGKEYCKVSNKALPAPIEKT 363  
 QY 121 ISKAKGQPREPOVYITLPFSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 364 ISKAKGQPREPOVYITLPFSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 423

QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFSVWHEALHNHYTKSLSPGK 232  
 Db 424 PVLDSGSPFLYSKLTVDKSRWQGNVFSVWHEALHNHYTKSLSPGK 475

RESULT 215  
 ADS88805  
 ID ADS88805 standard; protein; 475 AA.  
 AC ADS88805;  
 DT 16-DEC-2004 (first entry)  
 DE Humanised anti-MAG antibody heavy chain.  
 XX oligodendrocyte; stroke; neurological disease;  
 KW myelin-associated glycoprotein; MAG; anti-MAG antibody;  
 KW Alzheimer's disease; multiple sclerosis.  
 XX Homo sapiens.  
 OS Synthetic.  
 XX WO2004083363-A2.  
 XX 30-SEP-2004.  
 PD  
 XX 02-FEB-2004; 2004WO-EP001016.  
 XX 19-MAR-2003; 2003GB-00006309.  
 XX (GLAX ) GLAXO GROUP LTD.  
 PA Vinson M, Irving EA;  
 PI WPI; 2004-691029/67.  
 DR  
 XX Promoting oligodendrocyte survival in humans with neurological diseases,  
 PT such as Alzheimer's disease, multiple sclerosis and/or stroke, using an  
 PT anti-myelin-associated glycoprotein (MAG) antibody.  
 XX Example 4; SEQ ID NO 20; 45pp; English.  
 XX The specification describes a method for promoting oligodendrocyte  
 CC survival in a human suffering or at risk of developing stroke or another  
 CC neurological diseases. The method comprises administering to the human an  
 CC anti-myelin-associated glycoprotein (MAG) antibody or its functional  
 CC fragment. The anti-MAG antibody or its functional fragment is useful in  
 CC the manufacture of a medicament for the promotion of oligodendrocyte  
 CC survival in a human suffering from or at risk of developing stroke or  
 CC another neurological disease. They can also be used in treating  
 CC neurological diseases, such as Alzheimer's disease, multiple sclerosis  
 CC and/or stroke, by promoting oligodendrocyte survival. The present  
 CC sequence represents a humanised immunoglobulin heavy chain in which the  
 CC humanised anti-MAG heavy chain variable region is associated with a  
 CC functional immunoglobulin secretion signal sequence, and with a wild type  
 CC form of the human IgG1 constant region. Antibodies used in the method of  
 CC the invention may comprise the present heavy chain.  
 XX Sequence 475 AA;

Query Match 100.0%; Score 1263; DB 8; Length 475;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHCPAPELIGGSVFLPPKPKDGLMISRTPEVTCVVDVSHEDPEVKF 60  
 Db 244 EPKSCDKTHCPAPELIGGSVFLPPKPKDGLMISRTPEVTCVVDVSHEDPEVKF 303  
 QY 61 NWYVDGVEVHNATKPREQYNSTYRVVSVLTVLDHQLNGKEYKCKVSNKALPAPIEKT 120  
 Db 304 NWYVDGVEVHNATKPREQYNSTYRVVSVLTVLDHQLNGKEYKCKVSNKALPAPIEKT 363  
 QY 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 180

Db 364 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 423  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFSVWHEALHNHYTKSLSPGK 232  
 Db 424 PVLDSGSPFLYSKLTVDKSRWQGNVFSVWHEALHNHYTKSLSPGK 475

RESULT 216  
 AAR31023  
 ID AAR31023 standard; protein; 476 AA.  
 XX AAR31023;  
 AC AAR31023;  
 DT 25-MAR-2003 (revised)  
 DT 19-MAY-1993 (first entry)  
 XX  
 DE Antibody D heavy chain.  
 XX Heavy; light; chain; antibody; D; monoclonal; peripheral; blood;  
 KW lymphocyte; hepatitis A virus; HAV; sero; positive; patient; murine;  
 KW B5B3; polyadenylated; cDNA library; human; kappa; L; H.  
 XX Synthetic.  
 OS  
 XX Key  
 FH Peptide  
 FT 1..19  
 FT /note= "Signal peptide"  
 FT Region  
 FT 20..49  
 FT /label= FR1  
 FT Region  
 FT 50..54  
 FT /label= CDR1  
 FT Region  
 FT 55..68  
 FT /label= FR2  
 FT Region  
 FT 69..84  
 FT /label= CDR2  
 FT Region  
 FT 85..113  
 FT /label= FR3  
 FT Region  
 FT 114..121  
 FT /label= CDR3  
 FT Region  
 FT 122..132  
 FT /label= FR4  
 FT Domain  
 FT 133..241  
 FT /label= CH1  
 FT Region  
 FT 242..262  
 FT /label= HINGE  
 FT Domain  
 FT 263..379  
 FT /label= CH2  
 FT Domain  
 FT 380..497  
 FT /label= CH3  
 XX EP523949-A1.  
 XX 20-JAN-1993.  
 XX 14-JUL-1992; 92BP-00306420.  
 XX 15-JUL-1991; 91GB-00015284.  
 XX 01-AUG-1991; 91GB-00016594.  
 XX 23-MAR-1992; 92GB-00006284.  
 XX (WELL ) WELLCOME FOUND LTD.  
 XX Crowe JS, Lewis AP;  
 XX WPI; 1993-019951/03.  
 XX N-PSDB; AAQ35099.  
 XX Prodn. of recombinant primate antibodies - useful for treating infections  
 PT caused by hepatitis A, B and C, herpes, cytomegalovirus, AIDS, ARC, also  
 PT treat multiple sclerosis, arthritis etc.  
 XX Disclosure; Fig 2; 35pp; English.  
 PS

XX The sequences given in AAR31023-24 represent the heavy and light chains  
 CC of Antibody D respectively. Antibody D is a monoclonal antibody which was  
 CC derived from peripheral blood lymphocytes from a hepatitis A virus (HAV)  
 CC sero positive patient. Antibody D is closely related in nature to murine  
 CC antibody B5B3. Total RNA was isolated from antibody D expressing cells  
 CC and polyadenylated RNA was extracted. These polyA RNA's were used to  
 CC prepare a cDNA library which was screened for human kappa light (L)  
 CC chains and two positive clones were detected. Further heavy (H) chain  
 CC clones were also isolated. (Updated on 25-MAR-2003 to correct FN field.)  
 XX  
 SQ Sequence 476 AA;  
 Query Match 100.0%; Score 1263; DB 2; Length 476;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 245 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364  
 QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 365 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 424  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232  
 DB 425 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 476  
 RESULT 217  
 AAW01818  
 ID AAW01818 standard; protein; 476 AA.  
 AC AAW01818;  
 XX  
 DT 17-OCT-2003 (revised)  
 DT 25-MAY-1997 (first entry)  
 XX  
 DE Primatised anti-human B7.1 antigen antibody 7C10 heavy chain.  
 XX  
 KW Monoclonal antibody; cynomolgus monkey; macaque; 7C10;  
 KW primatised antibody; B7 antigen; CD28; immunosuppressive;  
 KW autoimmune disease; idiopathic thrombocytopenia purpura;  
 KW systemic lupus erythematosus; rheumatoid arthritis; psoriasis;  
 KW type 1 diabetes mellitus; graft versus host disease; hetero-hybridoma;  
 KW transfectoma.  
 XX  
 OS Macaca; cynomolgus.  
 OS Homo sapiens.  
 OS Chimeric.  
 XX  
 PN WO9640878-A1.  
 XX  
 PD 19-DEC-1996.  
 XX  
 PF 06-JUN-1996; 96WO-US010053.  
 XX  
 PR 07-JUN-1995; 95US-00487550.  
 XX  
 PA (IDEC-) IDEC PHARM CORP.  
 XX  
 PI Anderson DR, Brams P, Hanna N, Shestowsky WS;  
 XX  
 DR WPI; 1997-108638/10.  
 XX  
 PT Monkey monoclonal antibody binding human B7.1 or B7.2 antigen - useful  
 PT for treating auto:immune disease or graft-versus-host disease.

XX Claim 6; Fig 8B; 81pp; English.  
 XX  
 CC 2 Polypeptides (AAW01817 and AAW01818) respectively comprise primatised  
 CC forms of the light and heavy chains of cynomolgus monkey anti-human B7.1  
 CC antigen monoclonal antibody 7C10. Cloned 7C10 light and heavy variable  
 CC genes (see also AAT62509 and AAT62510) are inserted into an expression  
 CC vector (see pref. NEOSPLA) which contains human light and heavy chain  
 CC constant region genes to allow prodn. of the primatised antibody in e.g.  
 CC CHO cells. Primatised 7B6 and 16C10 anti-B7.1 antibodies have also been  
 CC produced (see also AAW01819-22). The primatised antibodies inhibit the  
 CC B7:CD28 pathway, making them useful immunosuppressants for the treatment  
 CC of autoimmune disorders and graft-versus-host disease. (Updated on 17-OCT  
 CC -2003 to standardise OS field)  
 XX  
 SQ Sequence 476 AA;  
 Query Match 100.0%; Score 1263; DB 2; Length 476;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 245 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364  
 QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 365 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 424  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232  
 DB 425 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 476  
 RESULT 218  
 AAW01822  
 ID AAW01822 standard; protein; 476 AA.  
 AC AAW01822;  
 XX  
 DT 17-OCT-2003 (revised)  
 DT 25-MAY-1997 (first entry)  
 XX  
 DE Primatised anti-human B7.1 antigen antibody 16C10 heavy chain.  
 XX  
 KW Monoclonal antibody; cynomolgus monkey; macaque; 16C10;  
 KW primatised antibody; B7 antigen; CD28; immunosuppressive;  
 KW autoimmune disease; idiopathic thrombocytopenia purpura;  
 KW systemic lupus erythematosus; rheumatoid arthritis; psoriasis;  
 KW type 1 diabetes mellitus; graft versus host disease; hetero-hybridoma;  
 KW transfectoma.  
 XX  
 OS Macaca; cynomolgus.  
 OS Homo sapiens.  
 OS Chimeric.  
 XX  
 PN WO9640878-A1.  
 XX  
 PD 19-DEC-1996.  
 XX  
 PF 06-JUN-1996; 96WO-US010053.  
 XX  
 PR 07-JUN-1995; 95US-00487550.  
 XX  
 PA (IDEC-) IDEC PHARM CORP.  
 XX  
 PI Anderson DR, Brams P, Hanna N, Shestowsky WS;  
 XX  
 DR WPI; 1997-108638/10.

DR N-PSDB; AAT62513.  
 XX Monkey monoclonal antibody binding human B7.1 or B7.2 antigen - useful  
 PT for treating auto-immune disease or graft-versus-host disease.  
 XX Claim 14; Fig 10B; 81pp; English.  
 XX  
 CC 2 Polypeptides (AAW01821 and AAW01822) respectively comprise primatised  
 CC forms of the light and heavy chains of cynomolgus monkey anti-human B7.1  
 CC antigen monoclonal antibody 16C10. Cloned 16C10 light and heavy variable  
 CC genes (see also AAT62512 and AAT62513) are inserted into an expression  
 CC vector (pref. NEOSPLA) which contains human light and heavy chain  
 CC constant region genes to allow prodn. of the primatised antibody in e.g.  
 CC CHO cells. Primatised 7C10 and 7B6 anti-B7.1 antibodies have also been  
 CC produced (see also AAW01817-20). The primatised antibodies inhibit the  
 CC B7:CD28 pathway, making them useful immunosuppressants for the treatment  
 CC of autoimmune disorders and graft-versus-host disease. (Updated on 17-OCT  
 CC -2003 to standardise OS field)  
 XX  
 XX Sequence 476 AA;  
 SQ  
 Query Match 100.0%; Score 1263; DB 2; Length 476;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKHTCTPCPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 245 EPKSCDKHTCTPCPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 304  
 QY 61 NWYVDGVEVHNATKPREQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 305 NWYVDGVEVHNATKPREQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 364  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 180  
 DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 424  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCVSNVMEALHNHYTQKSLSLSPGK 232  
 DB 425 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCVSNVMEALHNHYTQKSLSLSPGK 476  
 RESULT 219  
 AAW63761  
 ID AAW63761 standard; protein; 476 AA.  
 XX  
 AC AAW63761;  
 XX  
 DT 29-SEP-1998 (first entry)  
 XX  
 DE Macaque primatized 7C10 heavy chain DNA.  
 XX  
 KW Monoclonal antibody; Mab; macaque; heavy chain; primate; antigen; CD80;  
 KW CD86; inhibitor; immunosuppressant; treatment; autoimmune disease; IL-2;  
 KW T cell/B cell interaction; tumour; inflammation; imaging agent; vaccine;  
 KW immunogen; anti-idiotypic reagent; interleukin-2; IgG; immunoglobulin G;  
 KW T cell proliferation; ss.  
 XX  
 OS Macaca fascicularis.  
 XX  
 PN WO9819706-A1.  
 XX  
 PD 14-MAY-1998.  
 XX  
 XX 29-OCT-1997; 97WO-US019906.  
 PF  
 XX 08-NOV-1996; 96US-00746361.  
 PR  
 XX (IDEC-) IDEC PHARM CORP.  
 PA  
 XX Anderson DR, Hanna N, Brams P;  
 PI  
 XX WP1; 1998-286601/25.  
 XX

DR N-PSDB; AAV35485.  
 XX New monoclonal antibodies specific for B7.1 or B7.2 antigens and  
 PT inhibiting binding to CD28 - useful as specific immunosuppressants for  
 PT treating diseases that involve interactions between T and B cells, e.g.  
 PT graft rejection or tumours.  
 XX  
 XX Example 7; Fig 3b; 87pp; English.  
 XX  
 CC This sequence represents a primatised form of the antibody 7C10 heavy  
 CC chain from macaque. This sequence is used in a method which studies new  
 CC monoclonal antibodies (Mab's) that bind selectively to B7.1 (CD80) or to  
 CC B7.2 (CD86) antigens and inhibits binding of these antigens to CD28. Such  
 CC Mab's are specific immunosuppressants for treatment of diseases involving  
 CC T cell/B cell interactions, particularly autoimmune disease, specifically  
 CC idiopathic thrombocytopenia purpura, systemic lupus erythematosus, type  
 CC I diabetes mellitus, rheumatoid arthritis, psoriasis, aplastic anaemia,  
 CC inflammatory bowel disease, allergy and multiple sclerosis, graft vs.  
 CC host diseases, B cell lymphoma, infections (including by human immune  
 CC deficiency virus) or inflammatory disease and tumours. Optionally the Mab  
 CC can be conjugated to a drug or toxin. Mab's, or their fragments, can also  
 CC be used as imaging agents and as vaccines or immunogens to develop anti-  
 CC idiotypic reagents. Mab's are optionally combined with other proteins or  
 CC small molecule immunosuppressants. Blocking B7/CD28 interactions induces  
 CC long-term, antigen-specific immunosuppression, i.e. it inhibits  
 CC production of interleukin-2 (IL-2), T cell proliferation and antigen-  
 CC specific immunoglobulin G (IgG) responses  
 XX  
 XX Sequence 476 AA;  
 SQ  
 Query Match 100.0%; Score 1263; DB 2; Length 476;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKHTCTPCPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 245 EPKSCDKHTCTPCPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 304  
 QY 61 NWYVDGVEVHNATKPREQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 DB 305 NWYVDGVEVHNATKPREQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 364  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 180  
 DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 424  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCVSNVMEALHNHYTQKSLSLSPGK 232  
 DB 425 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCVSNVMEALHNHYTQKSLSLSPGK 476  
 RESULT 220  
 AAW63765  
 ID AAW63765 standard; protein; 476 AA.  
 XX  
 AC AAW63765;  
 XX  
 DT 29-SEP-1998 (first entry)  
 XX  
 DE Macaque primatized 16C10 heavy chain protein.  
 XX  
 KW Monoclonal antibody; Mab; macaque; heavy chain; primate; antigen; CD80;  
 KW CD86; inhibitor; immunosuppressant; treatment; autoimmune disease; IL-2;  
 KW T cell/B cell interaction; tumour; inflammation; imaging agent; vaccine;  
 KW immunogen; anti-idiotypic reagent; interleukin-2; IgG; immunoglobulin G;  
 KW T cell proliferation.  
 XX  
 OS Macaca fascicularis.  
 XX  
 PN WO9819706-A1.  
 XX  
 PD 14-MAY-1998.  
 XX

PF 29-OCT-1997; 97WO-US019906.  
 XX  
 PR 08-NOV-1996; 96US-00746361.  
 XX  
 XX (IDEC-) IDEC PHARM CORP.  
 XX  
 PI Anderson DR, Hanna N, Brame P;  
 XX  
 DR WPI; 1998-286601/25.  
 DR N-PSDB; AAV35489.  
 XX  
 XX New monoclonal antibodies specific for B7.1 or B7.2 antigens and  
 PT inhibiting binding to CD28 - useful as specific immunosuppressants for  
 PT treating diseases that involve interactions between T and B cells, e.g.  
 PT graft rejection or tumours.  
 XX  
 XX Example 7; Fig 5b; 87pp; English.  
 XX  
 CC This sequence represents a primatized form of the antibody 16C10 heavy  
 CC chain from macaque. This sequence is used in a method which studies new  
 CC monoclonal antibodies (Mab's) that bind selectively to B7.1 (CD80) or to  
 CC B7.2 (CD86) antigens and inhibits binding of these antigens to CD28. Such  
 CC Mab's are specific immunosuppressants for treatment of diseases involving  
 CC T cell/B cell interactions, particularly autoimmune disease, specifically  
 CC idiopathic thrombocytopenia purpura, systemic lupus erythematosus, type  
 CC I diabetes mellitus, rheumatoid arthritis, psoriasis, aplastic anaemia,  
 CC inflammatory bowel disease, allergy and multiple sclerosis, graft vs.  
 CC host diseases, B cell lymphoma, infections (including by human immune  
 CC deficiency virus) or inflammatory disease and tumours. Optionally the Mab  
 CC can be conjugated to a drug or toxin. Mab's, or their fragments, can also  
 CC be used as imaging agents and as vaccines or immunogens to develop anti-  
 CC idio-type reagents. Mab's are optionally combined with other proteins or  
 CC small molecule immunosuppressants. Blocking B7/CD28 interactions induces  
 CC long-term, antigen-specific immunosuppression, i.e. it inhibits  
 CC production of interleukin-2 (IL-2), T cell proliferation and antigen-  
 CC specific immunoglobulin G (IgG) responses  
 XX  
 XX Sequence 476 AA;

Query Match 100.0%; Score 1263; DB 2; Length 476;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 245 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 304  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 424  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 425 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 476

RESULT 221  
 AAW88464  
 ID AAW88464 standard; protein; 476 AA.  
 AC AAW88464;  
 XX  
 XX 10-MAY-1999 (first entry)  
 XX Monoclonal antibody 4B5 heavy chain variable region.  
 DE  
 XX Antigen binding fragment 4B5; monoclonal antibody; cancer; neoplasm;  
 KW diagnosis; therapy; melanoma; neuroblastoma; glioma; sarcoma;  
 KW lung carcinoma; metastasis; anti-idiotypic antibody; GD2 antigen; human.

XX Homo sapiens.  
 OS  
 PN WO9902545-A2.  
 XX  
 XX 21-JAN-1999.  
 XX  
 XX 08-JUL-1998; 98WO-IB001046.  
 XX  
 XX 08-JUL-1997; 97US-0051945P.  
 XX  
 XX (NOVO-) NOVOPHARM BIOTECH INC.  
 PA  
 PI Dan MD;  
 XX  
 DR WPI; 1999-120769/10.  
 DR N-PSDB; AAX06951.  
 XX  
 XX New antibody 4B5 polynucleotides and polypeptides - used to develop  
 PT products for the diagnosis and treatment of cancers and for prophylactic  
 PT therapy to reduce risk of recurrence.  
 XX  
 PS Claim 1; Page 79-80; 83pp; English.  
 XX  
 CC This polypeptide comprises the heavy chain variable region of the  
 CC recombinant human monoclonal antibody (Mab) 4B5. 4B5 recognises  
 CC antibodies specific for GD2 antigen antibodies. Antibodies specific for  
 CC GD2 recognise various cancers including glioblastoma, neuroblastoma,  
 CC malignant and/or metastatic melanoma, breast adenocarcinoma, lung  
 CC adenocarcinoma, small cell lung carcinoma, colon adenocarcinoma and  
 CC prostate adenocarcinoma. The invention encompasses 4B5 derivatives with  
 CC immunologic specificity for antibodies specific for GD2. These  
 CC derivatives, or antigen binding fragments, comprise regions of the 4B5  
 CC VDJ junction and regions spanning the 4B5 CDRs. Other derivatives include  
 CC Fab, Fab', Fab', scFv and isolated heavy and light chains (see also  
 CC AAW88465). Polynucleotide fragments (see AAX06951-54) encoding 4B5  
 CC antibody V regions are also provided, and therapeutic plasmids and  
 CC vectors, including vaccinia virus vectors, comprising these  
 CC polynucleotides. 4B5 has been shown to mimic GD2, and is particularly  
 CC useful in generating a host immune response to cancer. Products of the  
 CC invention can be used in the detection and treatment of e.g. astrocytoma,  
 CC oligodendroglioma, ependymoma, medulloblastoma, primitive neural  
 CC ectodermal tumour (PNET), pancreatic ductal adenocarcinoma, small and  
 CC large cell lung adenocarcinomas, squamous cell carcinoma,  
 CC bronchoalveolar carcinoma, epithelial adenocarcinoma, and liver metastases,  
 CC hepatoma, cholangiocarcinoma, breast tumours such as ductal and lobular  
 CC adenocarcinoma, squamous and adenocarcinomas of the uterine cervix,  
 CC uterine and ovarian epithelial carcinoma, prostatic adenocarcinoma,  
 CC transitional squamous cell carcinoma of the bladder, B and T cell  
 CC lymphoma (nodular and diffuse), plasmacytoma, acute and chronic leukemia,  
 CC malignant melanoma, soft tissue sarcoma and leiomyosarcoma  
 XX  
 SQ Sequence 476 AA;  
 Query Match 100.0%; Score 1263; DB 2; Length 476;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 245 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 304  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 424  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 425 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 476

RESULT 222  
 AAU11539  
 ID AAU11539 standard; protein; 476 AA.  
 XX  
 AC AAU11539;  
 XX  
 DT 12-MAR-2002 (first entry)  
 XX  
 DE Protein sequence of primatised form of the heavy chain of 7C10 antibody.  
 XX  
 KW Human; macaque monkey; light chain; primatised antibody; 7C10 antibody;  
 KW neuroprotective; apoptosis inducer; allergy; CD28 receptor antagonist;  
 KW B7.1 antigen; CD80; B7.2 antigen; CD86; B cell cancer; metastasis;  
 KW tumour; B cell lymphoma; B cell leukaemia; autoimmune disease;  
 KW graft-vs-host disease; immunosuppression; organ rejection; interleukin-2;  
 KW IL-2; mutant; mutein.  
 XX  
 OS Homo sapiens.  
 OS Macaca sp.  
 OS Synthetic.  
 OS Chimeric.  
 XX  
 PN WO200189567-A1.  
 XX  
 XX 29-NOV-2001.  
 XX  
 PF 22-MAY-2001; 2001WO-US016364.  
 XX  
 XX 22-MAY-2000; 2000US-00576424.  
 XX  
 XX (IDEC-) IDEC PHARM CORP.  
 PA  
 PI Anderson DR, Hanna N, Brams P;  
 XX  
 XX WPI; 2002-089895/12.  
 DR N-PSDB; AAS17243.  
 XX  
 PT Use of monoclonal antibody which specifically binds to B7.1 antigen CD80  
 PT and/or B7.2 antigen CD86 for inducing apoptosis of B7+ cells, treating  
 PT cancer, graft-vs-host disease and autoimmune disease such as allergy.  
 XX  
 PS Example 8; Fig 3b; 89pp; English.  
 XX  
 CC The present invention relates to a new use of a monoclonal antibody which  
 CC specifically binds to B7.1 antigen (CD80) and/or B7.2 antigen (CD86) for  
 CC inducing the apoptosis of B7+ cells. The invention is useful for treating  
 CC diseases such as B cell cancer, lymphoma, a cancer where B cells promote  
 CC the growth and/or metastasis of tumours, B cell lymphoma, B cell  
 CC leukaemia, and autoimmune diseases such as idiopathic thrombocytopenia  
 CC purpura, systemic lupus, erythematosis, type 1 diabetes mellitus,  
 CC rheumatoid arthritis, psoriasis, aplastic anaemia, inflammatory bile  
 CC disease, allergy, multiple sclerosis or graft-vs-host disease. The  
 CC antibody is useful for immunosuppression in a human or animal and for  
 CC treating or preventing resistance to or rejection of transplanted organ  
 CC or tissue for treating proliferative and hyperproliferative diseases, for  
 CC treating reversible obstructive airways disease, intestinal inflammations  
 CC and allergies e.g. Crohn's disease and ulcerative colitis, food-related  
 CC allergies e.g. migraine, rhinitis and eczema, and other types of  
 CC 7C10, a primatised antibody used in the invention to induce apoptosis and  
 CC inhibit production of interleukin-2 (IL-2)  
 XX  
 SQ Sequence 476 AA;  
 Query Match 100.0%; Score 1263; DB 5; Length 476;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 245 EPKSCDKTHCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 304

QY 61 NMVVDGVEVHNAKTKPREQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 |||||  
 DB 305 NMVVDGVEVHNAKTKPREQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364  
 |||||  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTP 180  
 |||||  
 DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTP 424  
 |||||  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 |||||  
 DB 425 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 476  
 |||||

RESULT 223  
 AAU11646  
 ID AAU11646 standard; protein; 476 AA.  
 XX  
 AC AAU11646;  
 XX  
 DT 12-MAR-2002 (first entry)  
 XX  
 DE Protein sequence of primatised form of the heavy chain of 16C10 antibody.  
 XX  
 KW Human; macaque monkey; light chain; primatised antibody; 16C10 antibody;  
 KW neuroprotective; apoptosis inducer; allergy; CD28 receptor antagonist;  
 KW B7.1 antigen; CD80; B7.2 antigen; CD86; B cell cancer; metastasis;  
 KW tumour; B cell lymphoma; B cell leukaemia; autoimmune disease;  
 KW graft-vs-host disease; immunosuppression; organ rejection; interleukin-2;  
 KW IL-2; mutant; mutein.  
 XX  
 OS Homo sapiens.  
 OS Macaca sp.  
 OS Synthetic.  
 OS Chimeric.  
 XX  
 PN WO200189567-A1.  
 XX  
 XX 29-NOV-2001.  
 XX  
 PF 22-MAY-2001; 2001WO-US016364.  
 XX  
 XX 22-MAY-2000; 2000US-00576424.  
 XX  
 XX (IDEC-) IDEC PHARM CORP.  
 PA  
 PI Anderson DR, Hanna N, Brams P;  
 XX  
 XX WPI; 2002-089895/12.  
 DR N-PSDB; AAS17247.  
 XX  
 PT Use of monoclonal antibody which specifically binds to B7.1 antigen CD80  
 PT and/or B7.2 antigen CD86 for inducing apoptosis of B7+ cells, treating  
 PT cancer, graft-vs-host disease and autoimmune disease such as allergy.  
 XX  
 PS Example 8; Fig 5b; 89pp; English.

The present invention relates to a new use of a monoclonal antibody which  
 specifically binds to B7.1 antigen (CD80) and/or B7.2 antigen (CD86) for  
 inducing the apoptosis of B7+ cells. The invention is useful for treating  
 diseases such as B cell cancer, lymphoma, a cancer where B cells promote  
 the growth and/or metastasis of tumours, B cell lymphoma, B cell  
 leukaemia, and autoimmune diseases such as idiopathic thrombocytopenia  
 purpura, systemic lupus, erythematosis, type 1 diabetes mellitus,  
 rheumatoid arthritis, psoriasis, aplastic anaemia, inflammatory bile  
 disease, allergy, multiple sclerosis or graft-vs-host disease. The  
 antibody is useful for immunosuppression in a human or animal and for  
 treating or preventing resistance to or rejection of transplanted organ  
 or tissue for treating proliferative and hyperproliferative diseases, for  
 treating reversible obstructive airways disease, intestinal inflammations  
 and allergies e.g. Crohn's disease and ulcerative colitis, food-related  
 allergies e.g. migraine, rhinitis and eczema, and other types of  
 allergies. The present protein sequence represents the heavy chain of

CC 16C10, a primatised antibody used in the invention to induce apoptosis  
CC and inhibit production of interleukin-2 (IL-2)  
XX  
SQ Sequence 476 AA;  
  
Query Match 100.0%; Score 1263; DB 5; Length 476;  
Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 245 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304  
  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 424  
  
QY 181 PVLDSGSEFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 425 PVLDSGSEFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 476  
  
RESULT 224  
AAE37360  
ID AAE37360 standard; protein; 476 AA.  
XX  
AC AAE37360;  
XX  
DT 27-AUG-2003 (first entry)  
XX  
DE Monkey 7C10 antibody heavy chain protein.  
XX  
KW Monkey; antibody dependent cellular cytotoxicity; ADCC; cell lymphoma;  
KW complement dependent cytotoxicity; CDC; Burkitt's type leukaemia; MCL;  
KW mantle cell lymphoma; Hodgkin's lymphoma; non-Hodgkin's lymphoma; NHL;  
KW B cell leukaemia; chronic lymphocytic leukaemia; CLL; FCC; cytostatic;  
KW diffuse large cell lymphoma; DLCL; Waldenstrom's Macroglobulinaemia;  
KW monocytic cell leukaemia; antibody.  
XX  
OS Macaca sp.  
XX  
XX  
XX WO2003039486-A2.  
XX  
XX  
PD 15-MAY-2003.  
XX  
XX  
XX 12-NOV-2002; 2002WO-US036226.  
XX  
XX  
XX 09-NOV-2001; 2001US-0331187P.  
XX  
XX (IDEC-) IDEC PHARM CORP.  
XX  
XX Hariharan K, Hanna N;  
XX  
XX WPI; 2003-441463/41.  
XX  
XX N-PSDB; AAD56527.  
XX  
XX  
XX Potentiating antibody dependent cellular cytotoxicity or complement  
XX dependent cytotoxicity activity of anti-CD80 antibody against CD80  
XX positive cells, treating B cell malignancy, by administering anti-CD80  
XX antibody.  
XX  
XX Example 15; Fig 8B; 105pp; English.  
XX  
XX The invention relates to a method for treating B cell malignancy using  
XX anti-CD80 antibody alone or in combination with anti-CD20 antibody. The  
XX method is useful to potentiate antibody dependent cellular cytotoxicity  
XX (ADCC) or complement dependent cytotoxicity (CDC) activity of anti-CD80  
XX antibody against CD80 positive cells, and treating B cell malignancy  
XX including B cell lymphoma (e.g. mantle cell lymphoma (MCL), Hodgkin's

CC lymphoma, non-Hodgkin's lymphoma, low grade/follicular non-Hodgkin's  
CC lymphoma (NHL), cell lymphoma (FCC), diffuse large cell lymphoma (DLCL),  
CC small lymphocyte (SL) NHL, intermediate grade/follicular NHL, high grade  
CC immunoblastic NHL, high grade lymphoblastic NHL, intermediate grade  
CC diffuse NHL, high grade small non-cleaved cell NHL, bulky disease NHL and  
CC Waldenstrom's Macroglobulinaemia) or B cell leukaemia (e.g. ALL-L3  
CC (Burkitt's type leukaemia), chronic lymphocytic leukaemia (CLL) and  
CC monocytic cell leukaemia). The present sequence is monkey 7C10 antibody  
CC heavy chain protein. This sequence is used to illustrate the method of  
CC the invention  
XX  
SQ Sequence 476 AA;  
  
Query Match 100.0%; Score 1263; DB 6; Length 476;  
Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 245 EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304  
  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 424  
  
QY 181 PVLDSGSEFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 425 PVLDSGSEFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 476  
  
RESULT 225  
ABR61564  
ID ABR61564 standard; protein; 476 AA.  
XX  
AC ABR61564;  
XX  
DT 15-JAN-2004 (first entry)  
XX  
DE Human MAb IgG1b12 heavy chain.  
XX  
XX  
XX Adeno-associated virus; rAAV; IgG1b12; ScFvX5; anti-HIV; antibacterial;  
KW antirheumatic; antiarthritic; cytostatic; sedative; antiinflammatory;  
KW neuroprotective; gene therapy; vaccine; antibody; MAb.  
XX  
XX Homo sapiens.  
XX  
XX WO2003087324-A2.  
XX  
XX 23-OCT-2003.  
XX  
XX 09-APR-2003; 2003WO-US010865.  
XX  
XX 09-APR-2002; 2002US-0371501P.  
XX  
XX (CHIL-) CHILDRENS HOSPITAL INC.  
XX  
XX Clark KR, Johnson PR;  
XX  
XX WPI; 2003-833721/77.  
XX  
XX N-PSDB; ACF58045.  
XX  
XX New recombinant adeno-associated virus (rAAV)/IgG1b12 or rAAV/ScFvX5  
XX genome, useful for preventing or treating viral infections (e.g. HIV),  
XX bacterial infections or other chronic disease states (e.g. cancer,  
XX inflammation or kuru).  
XX  
XX Example 1; Page 35-37; Opp; English.  
XX  
XX The invention relates to a recombinant adeno-associated virus (rAAV)/

CC IgG1b12 or rAAV/ScFvX5 genome. The rAAV is useful for gene delivery,  
CC particularly in delivering antibody genes to target cells in mammals. The  
CC antibodies may be used to prevent and/or treat viral infections  
CC (particularly HIV), bacterial infections and other chronic disease states  
CC (e.g. cancer, rheumatoid arthritis, inflammation, fatal familial  
CC insomnia, kuru, Mad Cow Disease or Alpers syndrome). The present sequence  
CC represents the human monoclonal antibody (MAb) IgG1b12 heavy chain  
XX  
SQ

Query Match 100.0%; Score 1263; DB 7; Length 476;  
Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHRCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 245 EPKSCDKTHRCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 304  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPSPDI AVEVESNGQPNNTKTP 120  
DB 305 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPSPDI AVEVESNGQPNNTKTP 364  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPNNTKTP 180  
DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPNNTKTP 424  
QY 181 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232  
DB 425 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 476

RESULT 226  
ADM05603  
ID ADM05603 standard; protein; 476 AA.  
XX  
AC ADM05603;  
XX  
DT 20-MAY-2004 (first entry)  
XX  
DE Human protein of the invention SEQ ID NO:4288.  
XX  
KW human; gene therapy; diagnostic marker; pharmaceutical.  
XX  
OS Homo sapiens.  
XX  
PN EPI1347046-A1.  
XX  
PD 24-SEP-2003.  
XX  
PF 12-APR-2002; 2002EP-00008400.  
XX  
PR 22-MAR-2002; 2002JP-00137785.  
XX  
PA (REAS-) RES ASSOC BIOTECHNOLOGY.  
XX  
PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;  
PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;  
PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;  
XX  
DR WPI; 2003-723558/69.  
DR N-PSDB; ADM03160.  
XX

New polynucleotides and polypeptides are useful in gene therapy, for  
developing a diagnostic marker or medicines for regulating their  
expression and activity, or as a target of gene therapy.  
XX  
PS Claim 1; SEQ ID NO 4288; 305pp; English.  
XX  
The invention relates to a novel human polynucleotide and the encoded  
polypeptide. A polynucleotide of the invention may have a use in gene  
therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful  
as a primer for synthesizing the polynucleotide or as a probe for  
detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are

CC useful in gene therapy, for developing a diagnostic marker or medicines  
CC for regulating their expression and activity, or as a target of gene  
CC therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides  
CC are useful as pharmaceutical agents. The present sequence represents a  
CC protein sequence of the invention.  
XX  
SQ

Query Match 100.0%; Score 1263; DB 7; Length 476;  
Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHRCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 245 EPKSCDKTHRCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 304  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPSPDI AVEVESNGQPNNTKTP 120  
DB 305 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPSPDI AVEVESNGQPNNTKTP 364  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPNNTKTP 180  
DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPNNTKTP 424  
QY 181 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 232  
DB 425 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSPGK 476

RESULT 227  
AAW90207  
ID AAW90207 standard; protein; 477 AA.  
XX  
AC AAW90207;  
XX  
DT 10-MAY-1999 (first entry)  
XX  
DE hB7.2Fc soluble fusion protein.  
XX  
KW B7 binding molecule; costimulatory molecule; B7.1; CD80; B7.2; CD86;  
KW T cell activation; inhibitor; graft versus host disease;  
KW transplant rejection; allograft rejection; autoimmune disease; allergy;  
KW therapy; human; antibody; hB7.1fc.  
XX  
OS Homo sapiens.  
OS Synthetic.  
OS Chimeric.  
XX  
FH Key Location/Qualifiers  
FT Peptide 1..16  
FT /note= "potential eukaryotic secretory signal peptide"  
FT Domain 17..239  
FT /note= "human B7.2 (mature protein) extracellular domain"  
FT Peptide 240..245  
FT /note= "introduced by PCR cloning strategy"  
FT Protein 246..477  
FT /note= "human IgG1-Fc (hinge-CH2-CH3)"  
XX  
XX WO9588965-A2.  
XX  
PD 30-DEC-1998.  
XX  
XX 22-JUN-1998; 98WO-EP003791.  
XX  
PR 20-JUN-1997; 97EP-00870092.  
XX  
XX (INNO-) INNOGENETICS NV.  
XX  
PI Lorre K, Sablon E, Buyse M, Bosman A;  
XX  
DR WPI; 1999-105615/09.  
XX  
PT New molecules which bind B7.1 and B7.2 - useful to prevent and treat

immune diseases including allograft rejection.

Example 3.1.1.3; Fig 3; 182pp; English.

This 54 kDa soluble fusion protein, termed hB7.2Fc, is composed of human co-stimulatory molecule B7.2 extracellular domain fused C-terminally to human IgG1-Fc. It was produced by PCR amplification of hB7.2 cDNA in plasmid pcDNAneo-hB7.2, and insertion of the amplified cDNA into pVL-Fc (ICCG3048), resulting in pVushB7.2-Fc (ICCG3004) baculotransfer plasmid. The invention relates to molecules such as diabodies, trivalent and tetraivalent antibodies and small antigen binding peptides which can cross -link, or cross-react with, B7.1 and B7.2 expressed on professional antigen presenting cells leading to the inhibition of antigen-specific T cell activation. Methods to produce such molecules are provided. The molecules are used to treat or prevent diseases of the immune system, in particular graft rejection, graft versus host disease, allergy and autoimmune diseases (claimed)

Sequence 477 AA;  
Query Match 100.0%; Score 1263; DB 2; Length 477;  
Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 246 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKDTLMISRTPEVTCVVDVSHEDPEVKF 305  
QY 61 NWTVDGVEVHNKTPREEQYNTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 306 NWTVDGVEVHNKTPREEQYNTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 365  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 366 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 425  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSVNHEALHNHYTQKSLSLSPGK 232  
Db 426 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSVNHEALHNHYTQKSLSLSPGK 477

RESULT 228  
ADM05604  
ID ADM05604 standard; protein; 477 AA.

AC ADM05604;

XX 20-MAY-2004 (first entry)

DE Human protein of the invention SEQ ID NO:4289.

XX human; gene therapy; diagnostic marker; pharmaceutical.

OS Homo sapiens.

XX EP1347046-A1.

XX 24-SEP-2003.

XX 12-APR-2002; 2002EP-00008400.

XX 22-MAR-2002; 2002JP-00137785.

XX (REAS-) RES ASSOC BIOTECHNOLOGY.

PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;  
PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;  
PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;  
XX WPI; 2003-723558/69.  
DR N-PSDB; ADM03161.

XX New polynucleotides and polypeptides are useful in gene therapy, for

PT developing a diagnostic marker or medicines for regulating their  
PT expression and activity, or as a target of gene therapy.

XX Claim 1; SEQ ID NO 4289; 305pp; English.

XX The invention relates to a novel human polynucleotide and the encoded  
CC polypeptide. A polynucleotide of the invention may have a use in gene  
CC therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful  
CC as a primer for synthesizing the polynucleotide or as a probe for  
CC detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are  
CC useful in gene therapy, for developing a diagnostic marker or medicines  
CC for regulating their expression and activity, or as a target of gene  
CC therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides  
CC are useful as pharmaceutical agents. The present sequence represents a  
CC protein sequence of the invention.

XX Sequence 477 AA;

Query Match 100.0%; Score 1263; DB 7; Length 477;  
Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 246 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKDTLMISRTPEVTCVVDVSHEDPEVKF 305  
QY 61 NWTVDGVEVHNKTPREEQYNTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 306 NWTVDGVEVHNKTPREEQYNTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 365  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 366 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 425  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSVNHEALHNHYTQKSLSLSPGK 232  
Db 426 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSVNHEALHNHYTQKSLSLSPGK 477

RESULT 229

ADQ65990  
ID ADQ65990 standard; protein; 477 AA.

XX AC ADQ65990;

XX 07-OCT-2004 (first entry)

XX Novel human protein sequence #963.

DE osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;  
KW gene therapy; diagnostic marker; morbid state; osteoporosis;  
KW neurological disease; Alzheimer's disease; Parkinson's disease; dementia;  
KW cancer.

OS Homo sapiens.

XX EP1440981-A2.

XX 28-JUL-2004.

XX 21-JAN-2004; 2004EP-00001196.

XX 21-JAN-2003; 2003JP-00102206.

XX 09-MAY-2003; 2003JP-00131392.

XX (REAS-) RES ASSOC BIOTECHNOLOGY.

PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;  
PI Yamamoto J, Isono Y, Nagai K, Irie R;  
XX WPI; 2004-535376/52.  
DR N-PSDB; ADQ63802.

PT Novel 2495 cDNA, useful for treating osteoporosis, neurological diseases,  
PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.  
XX  
PS Claim 1; SEQ ID NO 3151; 2449pp; English.

The invention relates to 2495 novel polynucleotides (I) and their encoded polypeptides, sequences hybridizing to these nucleotides, sequences encoding partial polypeptides and sequences having 70% or 90% identity to the nucleotide and protein sequences. The nucleotides and polypeptides are useful as diagnostic markers or therapeutic target for the diseases or morbid states. They are also useful for treating osteoporosis, neurological diseases, Alzheimer's diseases, Parkinson's diseases, dementia and various cancers. This sequence corresponds to a protein sequence of the invention.

Sequence 477 AA:

Query Match	100.0%	Score 1263	DB 8	Length 477
Best Local Similarity	100.0%	Pred. No. 3.6e-91		
Matches 232	Conservative	0	Mismatches 0	Indels 0
			Gaps 0	

Qy	1	EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDSHEDPEVKF	60
Db <td>246</td> <td>EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDSHEDPEVKF</td> <td>305</td>	246	EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDSHEDPEVKF	305

<b>Qy</b>	61	NWYDGV	VHNAKTPR	EYNSTYRW	SVLTVLHODWLNGEYKCKVSNKALPAPIEKT	120
<b>Db</b>	306	NWYDGV	VHNAKTPR	EYNSTYRW	SVLTVLHODWLNGEYKCKVSNKALPAPIEKT	365

Qy	121	ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTP	180
Db	366	ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGQPENNYKTP	425

Qy	181	PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTKSLSLSPGK	232
Dp	426	PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTKSLSLSPGK	477

RESULT 230

REC'D 230  
ADR10018  
ID ADR10018 standard: protein: 477 AA.

04-NOV-2004 (first entry)

Human protein useful for treating neurological disease Seq 3524.

human; oligo-capping method; diagnostic marker; gene therapy;  
osteoporosis; neurological disease; Alzheimer's disease;  
Parkinson's disease; dementia; short memory; cancer;  
sense or motor function; emotional reaction; fear response; panic;  
osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;  
tranquilliser.

xx  
os  
Homo sapiens.

XX PN EP1447413-A2

XX  
PD  
18-AUG-2004.XX  
PF 12-FEB-2004: 2004EP-00003145.XX  
PR 14-FEB-2003: 2003JP-00102207.

PR 09-MAY-2003; 2003JF-00131452.  
XX

XX PA (REAS-) RES ASSOC BIOTECHNOLOGY.

Isogai T, Yamamoto J, Nishikawa T, Isono Y, Sugiyama T, Otsuki T;  
PI Wakamatsu A, Ishii S, Nagai K, Irie R;  
XX

XX  
DR WPI: 2004-583265/57.

DR WEI, 2004-383283/  
DR N-PSDB: ADR08062;

XX

PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.

This invention relates to novel, isolated full length human cDNA molecules and the encoded proteins thereof. Specifically, it refers to cDNA clones obtained by an oligo-capping method, where none of these clones are identical to any known human mRNAs. The present invention describes an immunosay to identify agonists and antagonists, as well as antibodies, antisense molecules and siRNAs that can all be used to bind to and modulate expression of the cDNA molecules. As such, these molecules are useful for diagnostic markers or therapeutic targets for the various diseases or morbid states. In particular, they are useful in gene therapy for treating osteoporosis, neurological disease, Alzheimer's disease, Parkinson's disease, dementia, short memory and various cancers, as well as for maintaining equilibrium of sense or motor function, and for treating emotional reaction, fear response and panic. Accordingly, they exhibit osteopathic, neuroprotective, nootropic, antiparkinsonian, cycostatic and tranquilliser activities. This polypeptide is a protein encoded by a full length human cDNA sequence of the invention. NOTE: This sequence is not given in the sequence listing of the specification but can be obtained on CD-ROM from the European Patent Office, Vienna Sub-office.

Sequence 477 AA:

Query Match	100.0%	Score 1263	DB 8	Length 477
Best Local Similarity	100.0%	Pred. No. 3.6e-91		
Matches 232	Conservative	0	Mismatches 0	Indels 0
Gaps 0				

Qy	1	EPKSCDKTHTCPPCPAPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF	60
Db	246	EPKSCDKTHTCPPCPAPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF	305

Qy	61	NWYVDGVEVHNAKTKTPREQYNSYRVRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT
Dy	306	NWYVDGVEVHNAKTKTPREQYNSYRVRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT

Qy	121	ISKAKQBPREPQVYTLPPSRDELTKQVSLTCLVKGFYPSPDIAVWESNGQPENNYKTTTP	180
Db	366	ISKAKQBPREPQVYTLPPSRDELTKQVSLTCLVKGFYPSPDIAVWESNGQPENNYKTTTP	425

181 PVLDSGFFLYSKLTVDKSRWOOGNVFCSVMHEALHNHYTQKSLSLSPGK 232

426 PVLDSGFFLYSKLTVDKSRWQGNVFSCSMHEALHNHYTQKSLSPGK 477

RESULT 231

AAW63763

ID AAW63763 standard; protein; 478 AA.

AC AAW63763;

DT 29-SEP-1998 (first entry)

DE Macaque primatized 7B6 heavy chain protein.

Monoclonal antibody; Mab; macaque; heavy chain; primate; antigen; CD80;  
CD86; inhibitor; immunosuppressant; treatment; autoimmune disease; IL-2;  
T cell/B cell interaction; tumour; inflammation; imaging agent; vaccine;  
immunogen; anti-idiotypic reagent; interleukin-2; IgG; immunoglobulin G;  
T cell proliferation.

XX Macaca fascicularis.

XX PN WO9819706-A1.

XX  
PD  
14-MAV-1998

XX  
DE 29-0CT-1997. 97W0-115019906

XX

```
PR 08-NOV-1996; 96US-00746361.
XX (IDEC-) IDEC PHARM CORP.
PA
XX
XX Anderson DR, Hanna N, Brame P;
XX
XX WPI; 1998-286601/25.
XX N-PSDB; AAV35487.
XX
XX New monoclonal antibodies specific for B7.1 or B7.2 antigens and
XX inhibiting binding to CD28 - useful as specific immunosuppressants for
XX treating diseases that involve interactions between T and B cells, e.g.
XX graft rejection or tumours.
XX
XX Example 7; Fig 4b; 87pp; English.
XX
XX This sequence represents a primatised form of the antibody 7B6 heavy
XX chain from macaque. This sequence is used in a method which studies new
XX monoclonal antibodies (Mab's) that bind selectively to B7.1 (CD80) or to
XX B7.2 (CD86) antigens and inhibits binding of these antigens to CD28. Such
XX Mab's are specific immunosuppressants for treatment of diseases involving
XX T cell/B cell interactions, particularly autoimmune disease, specifically
XX idiopathic thrombocytopenia purpura, systemic lupus erythematosus, type
XX I diabetes mellitus, rheumatoid arthritis, psoriasis, aplastic anaemia,
XX inflammatory bowel disease, allergy and multiple sclerosis, graft vs.
XX host diseases, B cell lymphoma, infections (including by human immune
XX deficiency virus) or inflammatory disease and tumours. Optionally the Mab
XX can be conjugated to a drug or toxin. Mab's, or their fragments, can also
XX be used as imaging agents and as vaccines or immunogens to develop anti-
XX idio-type reagents. Mab's are optionally combined with other proteins or
XX small molecule immunosuppressants. Blocking B7/CD28 interactions induces
XX long-term, antigen-specific immunosuppression, i.e. it inhibits
XX production of interleukin-2 (IL-2), T cell proliferation and antigen-
XX specific immunoglobulin G (IgG) responses
XX
XX Sequence 478 AA;
XX
XX Query Match 100.0%; Score 1263; DB 2; Length 478;
XX Best Local Similarity 100.0%; Pred. No. 3.6e-91;
XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 EPKSCDKHTTCCPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
XX Db 247 EPKSCDKHTTCCPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 306
XX
XX QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 120
XX Db 307 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 366
XX
XX QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
XX Db 367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 426
XX
XX QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
XX Db 427 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 478
XX
XX RESULT 232
XX AAU11644
XX ID AAU11644 standard; protein; 478 AA.
XX AC
XX AAU11644;
XX
XX DT 12-MAR-2002 (first entry)
XX
XX Protein sequence of primatised form of the heavy chain of 7B6 antibody.
XX
XX Human; macaque monkey; light chain; primatised antibody; 7B6 antibody;
XX neuroprotective; apoptosis inducer; allergy; CD28 receptor antagonist;
XX B7.1 antigen; CD80; B7.2 antigen; CD86; B cell cancer; metastasis;
XX tumour; B cell lymphoma; B cell leukaemia; autoimmune disease;
XX graft-vs-host disease; immunosuppression; organ rejection; interleukin-2;
```

```
KW IL-2; mutant; mutein.
XX
XX Homo sapiens.
XX Macaca sp.
XX Synthetic.
XX Chimeric.
XX
XX PN WO200189567-A1.
XX
XX PD 29-NOV-2001.
XX
XX PF 22-MAY-2001; 2001WO-US016364.
XX
XX PR 22-MAY-2000; 2000US-00576424.
XX
XX PA (IDEC-) IDEC PHARM CORP.
XX
XX Anderson DR, Hanna N, Brame P;
XX
XX WPI; 2002-089895/12.
XX N-PSDB; AAS17245.
XX
XX Use of monoclonal antibody which specifically binds to B7.1 antigen CD80
XX and/or B7.2 antigen CD86 for inducing apoptosis of B7+ cells, treating
XX cancer, graft-vs-host disease and autoimmune disease such as allergy.
XX
XX Example 8; Fig 4b; 89pp; English.
XX
XX The present invention relates to a new use of a monoclonal antibody which
XX specifically binds to B7.1 antigen (CD80) and/or B7.2 antigen (CD86) for
XX inducing the apoptosis of B7+ cells. The invention is useful for treating
XX diseases such as B cell cancer, lymphoma, a cancer where B cells promote
XX the growth and/or metastasis of tumours, B cell lymphoma, B cell
XX leukaemia, and autoimmune diseases such as idiopathic thrombocytopenia
XX purpura, systemic lupus erythematosus, type 1 diabetes mellitus,
XX rheumatoid arthritis, psoriasis, aplastic anaemia, inflammatory bile
XX disease, allergy, multiple sclerosis or graft-vs-host disease. The
XX antibody is useful for immunosuppression in a human or animal and for
XX treating or preventing resistance to or rejection of transplanted organ
XX or tissue for treating proliferative and hyperproliferative diseases, for
XX treating reversible obstructive airways disease, intestinal inflammations
XX and allergies e.g. Crohn's disease and ulcerative colitis, food-related
XX allergies e.g. migraine, rhinitis and eczema, and other types of
XX allergies. The present protein sequence represents the heavy chain of
XX 7B6, a primatised antibody used in the invention to induce apoptosis
XX
XX Sequence 478 AA;
XX
XX Query Match 100.0%; Score 1263; DB 5; Length 478;
XX Best Local Similarity 100.0%; Pred. No. 3.6e-91;
XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 EPKSCDKHTTCCPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
XX Db 247 EPKSCDKHTTCCPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 306
XX
XX QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 120
XX Db 307 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 366
XX
XX QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
XX Db 367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 426
XX
XX QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
XX Db 427 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 478
XX
XX RESULT 233
XX AAU11644
XX ID AAU11644 standard; protein; 478 AA.
XX
```

AC AAE37362;  
 XX 27-AUG-2003 (first entry)  
 XX Monkey 7B6 antibody heavy chain protein.  
 XX  
 XX Monkey; antibody dependent cellular cytotoxicity; ADCC; cell lymphoma;  
 KW complement dependent cytotoxicity; CDC; Burkitt's type leukaemia; MCL;  
 KW mantle cell lymphoma; Hodgkin's lymphoma; non-Hodgkin's lymphoma; NHL;  
 KW B cell leukaemia; chronic lymphocytic leukaemia; CLL; FOC; cytostatic;  
 KW diffuse large cell lymphoma; DLCL; Waldenstrom's Macroglobulinaemia;  
 KW monocytic cell leukaemia; antibody.  
 XX  
 OS Macaca sp.  
 XX  
 XX Key Location/Qualifiers  
 XX Key Location/Qualifiers  
 XX Misc-difference 134 /note= "Encoded by TAA"  
 XX Misc-difference 158 /note= "Encoded by CCC"  
 XX  
 XX WO2003039486-A2.  
 XX 15-MAY-2003.  
 XX  
 XX 12-NOV-2002; 2002WO-US036226.  
 XX  
 XX 09-NOV-2001; 2001US-0331187P.  
 XX (IDEC-) IDEC PHARM CORP.  
 XX Hariharan K, Hanna N;  
 XX WPI; 2003-441463/41.  
 XX N-PSDB; AAD56529.  
 XX  
 XX Potentiating antibody dependent cellular cytotoxicity or complement  
 PT dependent cytotoxicity activity of anti-CD80 antibody against CD80  
 PT positive cells, treating B cell malignancy, by administering anti-CD80  
 PT antibody.  
 XX  
 XX Example 15; Fig 9B; 105pp; English.  
 XX  
 XX The invention relates to a method for treating B cell malignancy using  
 CC anti-CD80 antibody alone or in combination with anti-CD20 antibody. The  
 CC method is useful to potentiate antibody dependent cellular cytotoxicity  
 CC (ADCC) or complement dependent cytotoxicity (CDC) activity of anti-CD80  
 CC antibody against CD80 positive cells, and treating B cell malignancy  
 CC including B cell lymphoma (e.g. mantle cell lymphoma (MCL), Hodgkin's  
 CC lymphoma, non-Hodgkin's lymphoma, low grade/follicular non-Hodgkin's  
 CC lymphoma (NHL), cell lymphoma (FCC), diffuse large cell lymphoma (DLCL),  
 CC small lymphocyte (SL) NHL, intermediate grade/follicular NHL, high grade  
 CC immunoblastic NHL, high grade lymphoblastic NHL, intermediate grade  
 CC diffuse NHL, high grade small non-cleaved cell NHL, bulky disease NHL and  
 CC Waldenstrom's Macroglobulinaemia) or B cell leukaemia (e.g. ALL-L3  
 CC (Burkitt's type leukaemia), chronic lymphocytic leukaemia (CLL) and  
 CC monocytic cell leukaemia). The present sequence is monkey 7B6 antibody  
 CC heavy chain protein. This sequence is used to illustrate the method of  
 CC the invention  
 XX  
 XX SQ Sequence 478 AA;  
 Query Match 100.0%; Score 1263; DB 6; Length 478;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 247 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 306  
 QY 61 NWTVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 307 NWTVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 426  
 QY 181 PVLDSGSEFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
 DB 427 PVLDSGSEFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 478  
 RESULT 234  
 ADQ67023 standard; protein; 478 AA.  
 ID ADQ67023  
 XX AC ADQ67023;  
 XX 07-OCT-2004 (first entry)  
 XX DE Novel human protein sequence #1996.  
 XX KW osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;  
 KW gene therapy; diagnostic marker; morbid state; osteoporosis;  
 KW neurological disease; Alzheimer's disease; Parkinson's disease; dementia;  
 KW cancer.  
 XX OS Homo sapiens.  
 XX EP1440981-A2.  
 XX 28-JUL-2004.  
 XX 21-JAN-2004; 2004EP-00001196.  
 XX 21-JAN-2003; 2003JP-00102206.  
 XX 09-MAY-2003; 2003JP-00131392.  
 XX (REAS-) RES ASSOC BIOTECHNOLOGY.  
 XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;  
 XX Yamamoto J, Isono Y, Nagai K, Irie R;  
 XX WPI; 2004-535376/52.  
 XX N-PSDB; ADQ64835.  
 XX Novel 2495 cDNA, useful for treating osteoporosis, neurological diseases,  
 PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.  
 XX Claim 1; SEQ ID NO 4184; 2449pp; English.  
 XX The invention relates to 2495 novel polynucleotides (I) and their encoded  
 CC polypeptides, sequences hybridizing to these nucleotides, sequences  
 CC encoding partial polypeptides and sequences having 70% or 90% identity to  
 CC the nucleotide and protein sequences. The nucleotides and polypeptides  
 CC are useful as diagnostic markers or therapeutic target for the diseases  
 CC or morbid states. They are also useful for treating osteoporosis,  
 CC neurological diseases, Alzheimer's diseases, Parkinson's diseases,  
 CC dementia and various cancers. This sequence corresponds to a protein  
 CC sequence of the invention.  
 XX SQ Sequence 478 AA;  
 Query Match 100.0%; Score 1263; DB 8; Length 478;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 247 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 306  
 QY 61 NWTVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 307 NWTVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

QY	121	ISKAKGQPREPOVYITPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP	181
Db	367	ISKAKGQPREPOVYITPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP	426
QY	181	PVLSDSGSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK	232
Db	427	PVLSDSGSFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK	478
RESULT 235			
AAW90206			
ID	AAW90206 standard; protein; 480 AA.		
XX	AAW90206;		
XX			
DT	10-MAY-1999 (first entry)		
XX			
DE	hB7.1Fc soluble fusion protein.		
XX			
KW	B7 binding molecule; costimulatory molecule; B7.1; CD80; B7.2; CD86;		
XX	T cell activation; inhibitor; graft versus host disease;		
KW	transplant rejection; allograft rejection; autoimmune disease; allergy;		
XX	therapy; human; antibody; hB7.1Fc.		
XX			
OS	Homo sapiens.		
OS	Synthetic.		
OS	Chimeric.		
XX			
PH	Location/Qualifiers		
XX			
FT	Key	1..34	"potential eukaryotic secretory signal peptide"
FT	Peptide		/note=
FT	Domain	35..241	
FT	Peptide	242..248	/note= "human B7.1 (mature protein) extracellular domain"
FT	Peptide		/note= "introduced by PCR cloning strategy"
FT	Protein	249..480	
FT			/note= "human IgG1-Fc (hinge-CH2-CH3)"
XX			
XX	W09585965-A2.		
PN			
XX			
PD	30-DEC-1998.		
XX			
XX	22-JUN-1998; 98WO-EP003791.		
PF			
XX			
XX	20-JUN-1997; 97EP-00870092.		
PR			
XX			
PA	(INNO-) INNOGENETICS NV.		
XX			
PI	Lorre K, Sablon E, Buyse M, Boeman A;		
PI			
DR	WPI; 1999-105615/09.		
XX			
PT	New molecules which bind B7.1 and B7.2 - useful to prevent and treat		
PT	immune diseases including allograft rejection.		
XX			
XX	Example 3.1.1.3; Fig 2; 182pp; English.		
PS			
XX			
CC	This 54 kDa soluble fusion protein, termed hB7.1Fc, is composed of human		
CC	co-stimulatory molecule B7.1 extracellular domain fused C-terminally to		
CC	human IgG1-Fc. It was produced by PCR amplification of hB7.1 cDNA in		
CC	plasmid pcDNAneo-hB7.1, and insertion of the amplified cDNA into pVL-Fc		
CC	[ICCG3048], resulting in pVLhB7.1-Fc (ICCG3005) baculotransfer plasmid.		
CC	The invention relates to molecules such as diabodies, trivalent and		
CC	trivalent antibodies and small antigen binding peptides which can cross		
CC	-link, or cross-react with, B7.1 and B7.2 expressed on professional		
CC	antigen presenting cells leading to the inhibition of antigen-specific T		
CC	cell activation. Methods to produce such molecules are provided. The		
CC	molecules are used to treat or prevent diseases of the immune system, in		
CC	particular graft rejection, graft versus host disease, allergy and		
CC	autoimmune diseases (claimed)		
XX			
XX	Sequence 480 AA;		
SQ			

Query Match	100.0%; Score 1263; DB 2; Length 480;
Best Local Similarity	100.0%; Pred. No. 3.6e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	1 EPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPOTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db	249 EPKSCDKTHTCPPCPAPELLGGPSVFLPPPKPOTLMISRTPEVTCVVVDVSHEDPEVKF 308
QY	61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db	309 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368
QY	121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTP 180
Db	369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTP 428
QY	181 PVLDSGSGFFLYSKLTVDKSRWQQGNVPCSCVMHEALHNNHYTKQSLSPGK 232
Db	429 PVLDSGSGFFLYSKLTVDKSRWQQGNVPCSCVMHEALHNNHYTKQSLSPGK 480
RESULT 236	
AAU81008	
ID	AAU81008 standard; protein; 480 AA.
XX	XX
AC	AAU81008;
XX	XX
DT	09-APR-2002 (first entry)
XX	XX
DE	BSL1-Ig fusion construct.
XX	XX
KW	Human; immunosuppressive; antirheumatic; antiarthritic; antiulcer;
KW	antianemic; antipeptic; B7-related polypeptide; BSL1; BSL2; BSL3;
KW	autoimmune disease; rheumatoid arthritis; multiple sclerosis;
KW	Hashimoto's thyroiditis; Graves' disease; Crohn's disease; psoriasis;
KW	ulcerative colitis; pernicious anaemia; bone marrow transplantation;
KW	graft versus host disease; organ transplantation.
XX	XX
OS	Homo sapiens.
OS	Synthetic.
XX	XX
FN	WO200194413-A2.
XX	XX
PD	13-DEC-2001.
XX	XX
PF	06-JUN-2001; 2001WO-US018257.
XX	XX
PR	06-JUN-2000; 2000US-0209811P.
PR	28-FEB-2001; 2001US-0272107P.
XX	XX
PA	(BRIM ) BRISTOL-MYERS SQUIBB CO.
XX	XX
PI	Mikesell GE, Chang H, Finger JN, Yang G, Lu P, Zhou X, Peach R;
XX	XX
DR	WPI; 2002-090141/12.
DR	N-PSDB; ABK24012.
XX	XX
PT	Nucleic acids encoding B7-related polypeptides, i.e. BSL1, BSL2, or BSL3
PT	polypeptides, useful for treating autoimmune diseases (e.g. rheumatoid
PT	arthritis, multiple sclerosis, and psoriasis), and graft versus host
PT	disease.
XX	XX
PS	Example 2; Fig 2B; 179pp; English.
CC	The invention relates to novel nucleic acids encoding B7-related
CC	polypeptides. The B7-related polypeptides include the BSL1, BSL2, or BSL3
CC	polypeptides, or their soluble fragments. The nucleic acid, polypeptide,
CC	and antibodies are useful for treating autoimmune diseases (e.g.
CC	rheumatoid arthritis, multiple sclerosis, Hashimoto's thyroiditis,
CC	Graves' disease, Crohn's disease, ulcerative colitis, pernicious anaemia
CC	and psoriasis. They may also be used to treat tissue, bone marrow, and
CC	organ transplantation, and graft versus host disease. AAU81007-AAU81015
CC	represent B7-related proteins, BSL1, BSL2 and BSL3 amino acid sequences

CC and related sequences of the invention  
 XX  
 SQ Sequence 480 AA;

Query Match 100.0%; Score 1263; DB 5; Length 480;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 249 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 308  
 QY 61 NWTVDGVEVHNATKPREEQNSTYRVSVLTVLHQQDLNGKEYCKVSNKALPAPIEKT 120  
 DB 309 NWTVDGVEVHNATKPREEQNSTYRVSVLTVLHQQDLNGKEYCKVSNKALPAPIEKT 368  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 180  
 DB 369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 428  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKLSLSLSPGK 232  
 DB 429 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKLSLSLSPGK 480

## RESULT 237

AAO16239  
 ID AAO16239 standard; protein; 480 AA.

AC AAO16239;  
 XX  
 DT 28-MAR-2003 (first entry)  
 DE B7-related protein - SEQ ID No 13.  
 XX  
 XX Gene therapy; B7-related fusion protein; BSL2; viral infection;  
 KW immune response modulation; inflammatory response modulation; cancer;  
 KW transplantation rejection; graft versus host disease; asthma; herpes;  
 KW chronic obstructive pulmonary disease; HIV; encephalitis; psoriasis;  
 KW autoimmune disease; rheumatoid arthritis; multiple sclerosis.

XX Unidentified.

XX WO200299119-A2.

XX 12-DEC-2002.

XX 06-JUN-2002; 2002WO-US018049.

XX 06-JUN-2001; 2001US-00875338.

XX 15-FEB-2002; 2002US-00077023.

XX (BRIM ) BRISTOL-MYERS SQUIBB CO.

XX Mikesell GE, Shen H;

XX WPI; 2003-140629/13.

XX N-PSDB; ABT15898.

XX New isolated B7-related nucleic acid fusion molecules and fusion  
 PT polypeptides, useful for diagnostic applications, modulating the  
 PT activation of immune or inflammatory response cells, preventing or  
 PT treating cancer or psoriasis.

XX Claim 13; Fig 6B; 188pp; English.

XX The invention comprises the amino acid and coding sequence of B7-related  
 CC (BSL2) fusion proteins. The B7-related fusion proteins of the invention  
 CC are useful for modulating the activation of immune or inflammatory  
 CC response cells (e.g. T cells). The B7-related fusion proteins are useful  
 CC for treating or preventing: transplantation rejection; graft versus host  
 CC disease; asthma; chronic obstructive pulmonary disease; cancers; viral  
 CC infections (e.g. HIV, herpes or encephalitis); and autoimmune disease

CC (e.g. rheumatoid arthritis, multiple sclerosis or psoriasis). The present  
 CC amino acid sequence represents a B7-related protein

XX  
 SQ Sequence 480 AA;

Query Match 100.0%; Score 1263; DB 6; Length 480;  
 Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 249 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 308  
 QY 61 NWTVDGVEVHNATKPREEQNSTYRVSVLTVLHQQDLNGKEYCKVSNKALPAPIEKT 120  
 DB 309 NWTVDGVEVHNATKPREEQNSTYRVSVLTVLHQQDLNGKEYCKVSNKALPAPIEKT 368  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 180  
 DB 369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 428  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKLSLSLSPGK 232  
 DB 429 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKLSLSLSPGK 480

## RESULT 238

AAO16238

ID AAO16238 standard; protein; 480 AA.

AC AAO16238;  
 XX

XX 28-MAR-2003 (first entry)  
 XX

XX B7-related protein - SEQ ID No 11.

XX Gene therapy; B7-related fusion protein; BSL2; viral infection;  
 KW immune response modulation; inflammatory response modulation; cancer;  
 KW transplantation rejection; graft versus host disease; asthma; herpes;  
 KW chronic obstructive pulmonary disease; HIV; encephalitis; psoriasis;  
 KW autoimmune disease; rheumatoid arthritis; multiple sclerosis.

XX Unidentified.

XX WO200299119-A2.

XX 12-DEC-2002.

XX 06-JUN-2002; 2002WO-US018049.

XX 06-JUN-2001; 2001US-00875338.

XX 15-FEB-2002; 2002US-00077023.

XX (BRIM ) BRISTOL-MYERS SQUIBB CO.

XX Mikesell GE, Shen H;

XX WPI; 2003-140629/13.

XX N-PSDB; ABT15897.

XX New isolated B7-related nucleic acid fusion molecules and fusion  
 PT polypeptides, useful for diagnostic applications, modulating the  
 PT activation of immune or inflammatory response cells, preventing or  
 PT treating cancer or psoriasis.

XX Claim 36; Fig 5B; 188pp; English.

XX The invention comprises the amino acid and coding sequence of B7-related  
 CC (BSL2) fusion proteins. The B7-related fusion proteins of the invention  
 CC are useful for modulating the activation of immune or inflammatory  
 CC response cells (e.g. T cells). The B7-related fusion proteins are useful  
 CC for treating or preventing: transplantation rejection; graft versus host  
 CC disease; asthma; chronic obstructive pulmonary disease; cancers; viral

CC infections (e.g. HIV, herpes or encephalitis); and autoimmune disease  
CC (e.g. rheumatoid arthritis, multiple sclerosis or psoriasis). The present  
CC amino acid sequence represents a B7-related protein  
XX  
SQ Sequence 480 AA;

Query Match 100.0%; Score 1263; DB 6; Length 480;  
Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 249 EPKSCDKTHTCPPCPAPPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308  
QY 61 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 309 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 428  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSLSPGK 232  
Db 429 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSLSPGK 480

RESULT 239  
ABU07263  
ID ABU07263 standard; protein; 480 AA.  
AC ABU07263;  
XX  
DT 29-JAN-2003 (first entry)  
XX  
DE Human expressed protein tag (EPT) #1964.  
XX  
KW Translational profiling; expressed protein tag; EPT; kinase; phosphatase;  
KW protease; protease inhibitor; transporter; cytoskeletal protein;  
KW receptor; transcription factor; cancer; WBC;  
KW major histocompatibility complex; myeloma; colon cancer; gastric cancer;  
KW adenocarcinoma; sarcoma; melanoma; lymphoma; leukaemia.  
XX  
OS Homo sapiens.  
XX  
PN WO200278524-A2.  
XX  
PD 10-OCT-2002.  
XX  
PF 28-MAR-2002; 2002WO-US009671.  
XX  
PR 28-MAR-2001; 2001US-0279495P.  
PR 21-MAY-2001; 2001US-0292544P.  
PR 08-AUG-2001; 2001US-0310801P.  
PR 01-OCT-2001; 2001US-0326370P.  
PR 04-DEC-2001; 2001US-0336780P.  
PR 20-FEB-2002; 2002US-0358985P.  
XX  
XX (ZYCO-) ZYCOS INC.  
XX  
XX Chiciz RM, Tomlinson AJ, Urban RG;  
XX  
XX WPI; 2003-040607/03.  
XX  
XX New polypeptides (e.g. kinases, phosphatases, proteases, transporters,  
PT cytoskeletal proteins, receptors or transcription factors), useful for  
PT treating cancer, e.g. colon cancer, gastric cancer, sarcoma, lymphoma or  
PT leukemia.  
XX  
XX Example 2; SEQ ID NO 1964; 134pp; English.  
XX  
CC The invention describes a purified polypeptide, which comprises a  
fragment of a kinase, phosphatase, protease, protease inhibitor,

CC transporter, cytoskeletal protein, receptor or transcription factor. The  
CC polypeptide is useful as an immunogenic composition for eliciting in a  
CC mammal an immunogenic response directed against any of the purified  
CC polypeptide. The purified polypeptide, or the antibody that binds to this  
CC polypeptide, is useful for treating cancer. The polypeptide is also  
CC useful for identifying compounds that binds to a naturally processed  
CC class I or class II MHC-binding polypeptide. The polypeptides and  
CC polynucleotides are particularly useful for treating or preventing  
CC myeloma, colon cancer, gastric cancer, adenocarcinoma, sarcoma, melanoma,  
CC lymphoma or leukaemia. These are also useful for screening agents for  
CC treating the above mentioned diseases. This sequence represents an  
CC expressed protein tag (EPT) isolated from human tissue for translational  
CC profiling. Note: This sequence does not appear in the printed  
CC specification but was obtained in electronic format directly from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 480 AA;

Query Match 100.0%; Score 1263; DB 6; Length 480;  
Best Local Similarity 100.0%; Pred. No. 3.6e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 249 EPKSCDKTHTCPPCPAPPELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308  
QY 61 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 309 NNYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 428  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSLSPGK 232  
Db 429 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSLSPGK 480

RESULT 240  
AAR24442  
ID AAR24442 standard; protein; 481 AA.  
XX  
XX AAR24442;  
XX  
DT 25-MAR-2003 (revised)  
DT 02-JAN-1992 (first entry)  
XX  
DE Sequence of antibody molecule IgG1.  
XX  
KW Antibody; immunoglobulin G1.  
OS Homo sapiens.  
XX  
XX Key Location/Qualifiers  
FH Misc-difference 308 /label= N  
FT /note= "Substn. to create glycan addition site"  
FT Misc-difference 310 /label= S  
FT /note= "see above"  
FT Misc-difference 321 /label= N  
FT /note= "see above"  
FT Misc-difference 329 /label= N  
FT /note= "see above"  
FT Misc-difference 331 /label= S  
FT /note= "see above"  
FT Misc-difference 356 /label= N  
FT /note= "see above"  
FT

```

FT Misc-difference 369
FT FT /label= N
XX /note= "see above"
XX
XX WO9209293-A1.
XX PD
XX 11-JUN-1992.
XX PF
XX 18-NOV-1991; 91WO-US008605.
XX PR
XX 23-NOV-1990; 90US-00618314.
XX PA (GEOH ) GEN HOSPITAL CORP.
XX PI
XX Seed B, Walz G;
XX DR
XX WPI; 1992-216789/26.
XX DR N-PSDB; AAQ25443.
XX
XX Inhibition of cell adhesion mediated through ELAM-1 mol. binding - used
XX in treating chronic inflammation, rheumatoid arthritis, psoriasis, etc.
XX
XX Disclosure; Fig 1; 46pp; English.
XX
XX The IgG1, in its nascent form, bears no sialyl-Lex side chains. The
XX inventors designed a molecule including several such sites for attachment
XX of sialyl-Lex side chains (see AAR24442, FT). The additional N-linked
XX glycosylation sites are introduced at locations which impair complement
XX fixing and Fc receptor binding ability. They are preferably located in
XX the CH2 region of the Ig molecule. Antibodies bearing multiple sialyl-Lex
XX determinants are useful for disrupting undesirable interactions between
XX cells or proteins. Disrupting this interaction has therapeutic
XX applications, for example, in minimising inflammation following tissue
XX injury. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 481 AA;
XX
XX Query Match 100.0%; Score 1263; DB 2; Length 481;
XX Best Local Similarity 100.0%; Pred. No. 3.6e-91;
XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60
XX DB 250 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 309
XX
XX QY 61 NWYVDGVEVHNATKPREQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 120
XX DB 310 NWYVDGVEVHNATKPREQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 369
XX
XX QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
XX DB 370 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 429
XX
XX QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFSCVMEALHNHYTQKSLSLSPGK 232
XX DB 430 PVLDSGSPFLYSLKLTVDKSRWQQGNVFSCVMEALHNHYTQKSLSLSPGK 481
XX
XX RESULT 241
XX AAO19052
XX ID AAO19052 standard; protein; 489 AA.
XX
XX AC AAO19052;
XX
XX 14-NOV-2002 (first entry)
XX
XX Cell adhesion molecule related protein SEQ ID NO: 7.
XX
XX Cell adhesion molecule; immune function; immunomodulator; antiallergic;
XX antiinflammatory; autoimmune disease; allergy; inflammation; vasculitis;
XX hepatitis; septic shock; tumour.
XX
XX Unidentified.
XX
XX WO200264771-A1.
XX
XX 22-AUG-2002.
XX
XX 15-FEB-2002; 2002WO-JP001321.
XX
XX 15-FEB-2001; 2001JP-00039196.
XX
XX (MOCH ) MOCHIDA PHARM CO LTD.
XX
XX Nakamura Y, Sugano S, Kato Y, Takahashi T, Shirakawa K;
XX WPI; 2002-657596/70.
XX
XX Cell adhesion molecule-specific to activated leukocyte HRC12337, useful
XX in diagnosing, studying abnormal immune function and in screening
XX remedies for e.g. autoimmune diseases, inflammations and tumours.
XX
XX Disclosure; Page 114-116; 119pp; Japanese.
XX
XX The present invention relates to the protein and coding sequences of a
XX novel cell adhesion molecule. This molecule is specific to activated
XX leukocyte. The protein and its DNA are useful in diagnosing and studying
XX abnormal immune function and in screening remedies for e.g. autoimmune
XX diseases, immune failure, allergic diseases, inflammations like
XX vasculitis, hepatitis and septic shock, and tumours. The present sequence
XX is a protein described in the exemplification of the invention
XX
XX Sequence 489 AA;
XX
XX Query Match 100.0%; Score 1263; DB 5; Length 489;
XX Best Local Similarity 100.0%; Pred. No. 3.7e-91;
XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60
XX DB 258 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 317
XX
XX QY 61 NWYVDGVEVHNATKPREQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 120
XX DB 318 NWYVDGVEVHNATKPREQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 377
XX
XX QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
XX DB 378 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 437
XX
XX QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFSCVMEALHNHYTQKSLSLSPGK 232
XX DB 438 PVLDSGSPFLYSLKLTVDKSRWQQGNVFSCVMEALHNHYTQKSLSLSPGK 489
XX
XX RESULT 242
XX ADD25783
XX ID ADD25783 standard; protein; 492 AA.
XX
XX AC ADD25783;
XX
XX 15-JAN-2004 (first entry)
XX
XX Binding domain-immunoglobulin fusion protein-associated protein #157.
XX
XX Binding domain; immunoglobulin; fusion protein; cytostatic;
XX antiarthritic; immunosuppressive; antidiabetic; antithyroid;
XX neuroprotective; hinge region; immunoglobulin heavy chain;
XX CH2 constant region; CH3 constant region; IgG1;
XX antibody dependent cell-mediated cytotoxicity; ADCC; complement fixation;
XX malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma;
XX rheumatoid arthritis; myasthenia gravis; Grave's disease;
XX type I diabetes mellitus; multiple sclerosis; autoimmune disease.
XX
XX Unidentified.
XX

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PN US2003118592-A1.  
XX  
PD  
XX  
XX 26-JUN-2003.  
XX  
PF 25-JUL-2002; 2002US-00207655.  
XX  
XX 17-JAN-2001; 2001US-0367358P.  
PR 17-JAN-2002; 2002US-00053530.  
PR 03-JUN-2002; 2002US-0385691P.  
XX  
XX (GENE-) GENE-CRAFT INC.  
PA  
XX  
XX Ledbetter JA, Hayden-Ledbetter MS, Thompson PA;  
PI WPI; 2003-801317/75.  
XX  
XX New binding domain-immunoglobulin fusion protein, useful for treating a  
PT subject having or suspected of having a malignant condition or a B-cell  
FT disorder, e.g. melanoma, Grave's disease or autoimmune disease.  
PT  
XX  
XX Disclosure; SEQ ID NO 344; 157pp; English.  
XX  
XX The invention relates to a binding domain-immunoglobulin fusion protein  
CC comprising a binding domain polypeptide that is fused to an  
CC immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain  
CC CH2 constant region polypeptide that is fused to the hinge region  
CC polypeptide, and an immunoglobulin heavy chain CH3 constant region  
CC polypeptide that is fused to the CH2 constant region polypeptide. The  
CC hinge region polypeptide comprises: a wild-type human IgG1 immunoglobulin  
CC hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge  
CC region polypeptide, derived from (a) having 3 or more cysteine residues;  
CC where the mutated human IgG1 immunoglobulin hinge region polypeptide  
CC contains 2 cysteine residues, where the first cysteine is not mutated; a  
CC mutated human IgG1 immunoglobulin hinge region polypeptide, derived from  
CC (a) having 3 or more cysteine residues, where the mutated human IgG1  
CC immunoglobulin hinge region polypeptide contains no more than one  
CC cysteine residue; and a mutated human IgG1 immunoglobulin hinge  
CC polypeptide, derived from (a) having 3 or more cysteine residues; where  
CC the mutated human IgG1 immunoglobulin hinge region polypeptide contains  
CC no cysteine residues. The binding domain-immunoglobulin fusion protein is  
CC capable of at least one immunological activity comprising antibody  
CC dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The  
CC binding domain polypeptide is capable of specifically binding to an  
CC antigen. Also included are an isolated polynucleotide encoding the  
CC binding domain-immunoglobulin fusion protein, a recombinant expression  
CC construct comprising the polynucleotide (operably linked to a promoter),  
CC a host cell transformed or transfected with a recombinant expression  
CC construct, producing the binding domain-immunoglobulin fusion protein, a  
CC pharmaceutical composition comprising the binding domain-immunoglobulin  
CC fusion protein or polynucleotide and a carrier, and treating a subject  
CC having or suspected of having a malignant condition or a B-cell disorder.  
CC The binding domain-immunoglobulin fusion protein is useful for treating a  
CC subject having or suspected of having a malignant condition or a B-cell  
CC disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis,  
CC myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple  
CC sclerosis or autoimmune disease. The present sequence is a binding domain  
CC -immunoglobulin fusion protein-associated protein sequence. Note: The  
CC sequence data for this patent formed part of the printed specification  
CC and is also available in electronic format directly from USPTO at  
CC seqdata.uspto.gov/sequence.html?docid=20030118592. The authors have not  
CC identified the sequences in the printed specification by their SEQ ID  
CC number therefore none of the sequences can be explicitly identified.  
XX  
SQ Sequence 492 AA;

Query Match 100.0%; Score 1263; DB 7; Length 492;  
Best Local Similarity 100.0%; Pred. No. 3,7e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 261 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 320

QY 61 NMYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 321 NMYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 380  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTP 180  
Db 381 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTP 440  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNNHYTKQSLSPGK 232  
Db 441 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNNHYTKQSLSPGK 492  
RESULT 243  
AAY97172  
ID AAY97172 standard; protein; 497 AA.  
XX  
AC AAY97172;  
XX  
XX 04-DEC-2000 (first entry)  
XX  
XX Human FGF-RI Extracellular domain-Ig Fc fusion protein 3.  
XX  
KW FGF-R; fibroblast growth factor receptor; extracellular domain; IgG1;  
KW immunoglobulin; G1; oligomerization domain; Fc region; fusion protein;  
KW inhibitor; dimer; antagonist; cytostatic; anti-diabetic; vulnerary;  
KW ophthalmologic; anti-proliferative.  
XX  
OS Homo sapiens.  
XX  
XX Key Location/Qualifiers  
FH Peptide 1..21  
FT /label= FGF-RI\_signal\_peptide  
FT Domain 22..257  
FT /label= FGF-RI\_extracellular\_domain  
FT /note= "The Ig I segment and acid box are deleted"  
FT Domain 59..111  
FT /label= Ig\_I\_segment  
FT Domain 157..222  
FT /label= Ig\_III\_segment  
FT Peptide 258..265  
FT /label= Linker  
FT Region 266..497  
FT /label= Human IgG1 Fc region  
FT /note= "Contains hinge region and domains CH2 and CH3"  
XX  
XX WO20046380-A2.  
XX  
XX 10-AUG-2000.  
XX  
XX 07-FEB-2000; 2000WO-US003166.  
XX  
XX 08-FEB-1999; 99US-0119002P.  
XX (CHIR ) CHIRON CORP.  
XX  
XX Kavanaugh WM, Ballinger M;  
XX  
XX WPI; 2000-514961/46.  
XX N-PSDB; AAA52129.  
XX  
XX New polypeptide comprising a fibroblast growth factor receptor  
PT extracellular domain fused to a heterologous oligomerization domain for  
PT treating FGF-, angiogenesis-, or FGF receptor-mediated disorders.  
XX  
XX Claim 14; Page 58-59; 70pp; English.  
XX  
XX Novel fusion protein constructs comprise a fibroblast growth factor (FGF)  
CC receptor (FGF-R) extracellular domain (ECD) lacking the immunoglobulin  
CC (Ig) I segment fused to a heterologous oligomerization domain that  
CC comprises an immunoglobulin Fc region, hinge region, CH1, CH2, CH3 or CH4  
CC region, or light chain of an immunoglobulin molecule, or a peptide with a  
CC leucine zipper motif. The Ig I segment is not necessary for binding of

CC acidic FGF and basic FGF (bFGF). The Ig I deletion further increases the  
 CC affinity for aFGF and heparin, protects the core of the molecule from  
 CC proteolysis, and abrogates the heparin requirement for aFGF binding. The  
 CC new fusion polypeptides are better FGF inhibitors than FGF-R monomer  
 CC proteins. The FGF-R-Ig Fc fusion dimers are active as FGF antagonists at  
 CC subnanomolar concentrations and were 20-fold more potent than the FGF-R  
 CC monomer protein as competitors of bFGF binding to immobilized FGF-Rs. The  
 CC fusion constructs are useful to treat FGF-, angiogenesis-, or FGF-R-  
 CC mediated disorders, such as tumorigenesis (e.g. bladder, breast, lung,  
 CC rectal, testis and cervical tumours), neovascularization (e.g. diabetic  
 CC retinopathy, neovascular glaucoma, wound healing and corneal scarring)  
 CC and hyperproliferation of vascular smooth muscle cells (e.g.  
 CC postangioplasty and postatherectomy restenosis)

XX Sequence 497 AA;

Query Match 100.0%; Score 1263; DB 3; Length 497;  
 Best Local Similarity 100.0%; Pred. No. 3.8e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 266 EPKSCDKHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 325

QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 326 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 385

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSNQGPENNYKTP 180  
 DB 386 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSNQGPENNYKTP 445

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTOKSLSPGK 232  
 DB 446 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTOKSLSPGK 497

RESULT 244

ABG31025  
 ID ABG31025 standard; protein; 499 AA.

XX AC ABG31025;

XX 05-NOV-2002 (first entry)

XX Synthetic mouse/human chimeric fusion protein #1.

XX Immunosuppressive; antirheumatic; antithyroid; antidiabetic; mouse;  
 KW neuroprotective; gene therapy; single chain antibody; variable fragment;  
 KW scFv; binding domain-immunoglobulin fusion protein; B-cell disorder;  
 KW malignant condition; rheumatoid arthritis; myasthenia gravis; psoriasis;  
 KW Grave's disease; Hashimoto's thyroiditis; type I diabetes mellitus;  
 KW multiple sclerosis; systemic lupus erythematosus; Sjogrens syndrome;  
 KW immune thrombocytopenic purpura; scleroderma; cancer; Chron's disease;  
 KW ulcerative colitis; inflammatory bowel disease; immunological effector;  
 KW cell mediated cytotoxicity; complement dependent cytotoxicity;  
 KW complement fixation; mouse; human.

XX Mus musculus.

OS Homo sapiens.

OS Synthetic.

OS Chimeric.

XX Key Location/Qualifiers

FT Region 1..265

FT /note= "Mouse anti-human CD20 single chain variable

FT fragment (scFv)"

FT 266..499

FT /note= "Human immunoglobulinG1 (IgG1) wild type hinge,

FT fragment of crystallisation, CH2 and CH3 domains"

XX WO200256910-A1.

XX

PD 25-JUL-2002.

XX 17-JAN-2002; 2002WO-US0001487.

XX 17-JAN-2001; 2001US-00765208.

XX (GENE-) GENE-CRAFT INC.

XX Ledbetter JA, Hayden-Ledbetter M;

XX WPI; 2002-599691/64.

XX N-PSDB; ABK89848.

XX New human binding domain-immunoglobulin fusion protein useful for

XX treating a subject having or suspected of having a B-cell disorder or

XX malignant condition e.g. rheumatoid arthritis.

XX Disclosure; Page 120-121; 136pp; English.

XX The invention describes a binding domain-immunoglobulin fusion protein

XX that is capable of at least one immunological activity, comprising a

XX binding domain polypeptide fused to an immunoglobulin hinge region

XX polypeptide capable of specifically binding to an antigen, or an

XX immunoglobulin heavy chain CH2 or CH3 constant region polypeptide fused

XX to the hinge region polypeptide or to the CH2 constant region

XX polypeptide. The fusion protein is useful for treating a subject having

XX or suspected of having a B-cell disorder or malignant condition e.g.

XX rheumatoid arthritis, myasthenia gravis, Grave's disease, Hashimoto's

XX thyroiditis, type I diabetes mellitus, multiple sclerosis, systemic lupus

XX erythematosus, Sjogrens syndrome, immune thrombocytopenic purpura,

XX psoriasis, scleroderma, cancer and inflammatory bowel disease such as

XX Chron's disease and ulcerative colitis. The fusion protein retains the

XX ability to participate in well known immunological effector activities

XX including antibody dependent cell mediated cytotoxicity and/or complement

XX fixation in complement dependent cytotoxicity, despite having structures

XX that would not be expected to be capable of promoting the effector

XX activities. It can be produced in substantial quantities that are

XX typically greater than those routinely attained with single-chain

XX antibody constructs. This is the amino acid sequence of a chimeric fusion

XX protein created from the mouse anti-human CD20 single chain antibody

XX variable fragment (scFv) and the human immunoglobulin G (IgG) fragment of

XX crystallisation (Fv) tail, wild type hinge, CH2 and CH3 domains

XX Sequence 499 AA;

XX Query Match 100.0%; Score 1263; DB 5; Length 499;

XX Best Local Similarity 100.0%; Pred. No. 3.8e-91;

XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

DB 268 EPKSCDKHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 327

QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

DB 328 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 387

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSNQGPENNYKTP 180

DB 388 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSNQGPENNYKTP 447

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTOKSLSPGK 232

DB 448 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTOKSLSPGK 499

XX RESULT 245

XX ADD25587

XX ID ADD25587 standard; protein; 499 AA.

XX AC ADD25587;

XX 15-JAN-2004 (first entry)

XX DE Binding domain-immunoglobulin fusion protein-associated protein #71.  
 XX KW Binding domain; immunoglobulin; fusion protein; cytostatic;  
 KW antiarthritic; immunosuppressive; antidiabetic; antithyroid;  
 KW neuroprotective; hinge region; immunoglobulin heavy chain;  
 KW CH2 constant region; CH3 constant region; IgG1;  
 KW antibody dependent cell-mediated cytotoxicity; ADCC; complement fixation;  
 KW malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma;  
 KW rheumatoid arthritis; myasthenia gravis; Grave's disease;  
 KW type I diabetes mellitus; multiple sclerosis; autoimmune disease.  
 XX OS Unidentified.  
 XX US2003118592-A1.  
 XX PN 26-JUN-2003.  
 XX DT 25-JUL-2002; 2002US-00207655.  
 XX PR 17-JAN-2001; 2001US-0367358P.  
 XX PR 17-JAN-2002; 2002US-00053530.  
 XX PR 03-JUN-2002; 2002US-0385691P.  
 XX PA (GENE-) GENE-CRAFT INC.  
 XX PI Ledbetter JA, Hayden-Ledbetter MS, Thompson PA,  
 XX DR WPI; 2003-801317/75.  
 XX PT New binding domain-immunoglobulin fusion protein, useful for treating a  
 PT subject having or suspected of having a malignant condition or a B-cell  
 PT disorder, e.g. melanoma, Grave's disease or autoimmune disease.  
 XX PS Disclosure; SEQ ID NO 148; 157pp; English.  
 XX CC The invention relates to a binding domain-immunoglobulin fusion protein  
 CC comprising a binding domain polypeptide that is fused to an  
 CC immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain  
 CC CH2 constant region polypeptide that is fused to the hinge region  
 CC polypeptide, and an immunoglobulin heavy chain CH3 constant region  
 CC polypeptide that is fused to the CH2 constant region polypeptide. The  
 CC hinge region polypeptide comprises a wild-type human IgG1 immunoglobulin  
 CC hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge  
 CC region polypeptide, derived from (a) having 3 or more cysteine residues;  
 CC where the mutated human IgG1 immunoglobulin hinge region polypeptide  
 CC contains 2 cysteine residues, where the first cysteine is not mutated; a  
 CC mutated human IgG1 immunoglobulin hinge region polypeptide, derived from  
 CC (a) having 3 or more cysteine residues, where the mutated human IgG1  
 CC immunoglobulin hinge region polypeptide contains no more than one  
 CC cysteine residue; and a mutated human IgG1 immunoglobulin hinge region  
 CC polypeptide, derived from (a) having 3 or more cysteine residues; where  
 CC the mutated human IgG1 immunoglobulin hinge region polypeptide contains  
 CC no cysteine residues. The binding domain-immunoglobulin fusion protein is  
 CC capable of at least one immunological activity comprising antibody  
 CC dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The  
 CC binding domain polypeptide is capable of specifically binding to an  
 CC antigen. Also included are an isolated polynucleotide encoding the  
 CC binding domain-immunoglobulin fusion protein, a recombinant expression  
 CC construct comprising the polynucleotide (operably linked to a promoter),  
 CC a host cell transformed or transfected with a recombinant expression  
 CC construct, producing the binding domain-immunoglobulin fusion protein, a  
 CC pharmaceutical composition comprising the binding domain-immunoglobulin  
 CC fusion protein or polynucleotide and a carrier, and treating a subject  
 CC having or suspected of having a malignant condition or a B-cell disorder.  
 CC The binding domain-immunoglobulin fusion protein is useful for treating a  
 CC subject having or suspected of having a malignant condition or a B-cell  
 CC disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis,  
 CC myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple  
 CC sclerosis or autoimmune disease. The present sequence is a binding domain  
 CC -immunoglobulin fusion protein-associated protein sequence. Note: The  
 CC sequence data for this patent formed part of the printed specification  
 CC and is also available in electronic format directly from USPTO at

CC seqdata.uspto.gov/sequence.html?DocID=20030118592. The authors have not  
 CC identified the sequences in the printed specification by their SEQ ID  
 CC number therefore none of the sequences can be explicitly identified.  
 XX SQ Sequence 499 AA;  
 XX Query Match 100.0%; Score 1263; DB 7; Length 499;  
 XX Best Local Similarity 100.0%; Pred. No. 3.8e-91;  
 XX Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKYTHCTCPAPPELLGGPSVFLPPLPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
 DB 268 EPKSCDKYTHCTCPAPPELLGGPSVFLPPLPKDTLMISRTPEVTCVVVDVSHEDPEVKF 327  
 QY 61 NMYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDMLNGKEYKCKVSNKALPAPIEKT 120  
 DB 328 NMYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDMLNGKEYKCKVSNKALPAPIEKT 387  
 QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
 DB 388 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 447  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232  
 DB 448 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 499  
 RESULT 246  
 ID ADD25454 standard; protein; 499 AA.  
 XX AC ADD25454;  
 XX DT 15-JAN-2004 (first entry)  
 XX DE Binding domain-immunoglobulin fusion protein-associated protein #5.  
 KW Binding domain; immunoglobulin; fusion protein; cytostatic;  
 KW antiarthritic; immunosuppressive; antidiabetic; antithyroid;  
 KW neuroprotective; hinge region; immunoglobulin heavy chain;  
 KW CH2 constant region; CH3 constant region; IgG1;  
 KW antibody dependent cell-mediated cytotoxicity; ADCC; complement fixation;  
 KW malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma;  
 KW rheumatoid arthritis; myasthenia gravis; Grave's disease;  
 KW type I diabetes mellitus; multiple sclerosis; autoimmune disease.  
 XX OS Unidentified.  
 XX US2003118592-A1.  
 XX PD 26-JUN-2003.  
 XX DT 25-JUL-2002; 2002US-00207655.  
 XX PR 17-JAN-2001; 2001US-0367358P.  
 XX PR 17-JAN-2002; 2002US-00053530.  
 XX PR 03-JUN-2002; 2002US-0385691P.  
 XX PA (GENE-) GENE-CRAFT INC.  
 XX PI Ledbetter JA, Hayden-Ledbetter MS, Thompson PA,  
 XX DR WPI; 2003-801317/75.  
 XX PT New binding domain-immunoglobulin fusion protein, useful for treating a  
 PT subject having or suspected of having a malignant condition or a B-cell  
 PT disorder, e.g. melanoma, Grave's disease or autoimmune disease.  
 XX PS Disclosure; SEQ ID NO 15; 157pp; English.  
 XX CC The invention relates to a binding domain-immunoglobulin fusion protein  
 CC comprising a binding domain polypeptide that is fused to an  
 CC immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain  
 CC CH2 constant region polypeptide that is fused to the hinge region  
 CC polypeptide, and an immunoglobulin heavy chain CH3 constant region  
 CC polypeptide that is fused to the CH2 constant region polypeptide. The  
 CC hinge region polypeptide comprises a wild-type human IgG1 immunoglobulin  
 CC hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge  
 CC region polypeptide, derived from (a) having 3 or more cysteine residues;  
 CC where the mutated human IgG1 immunoglobulin hinge region polypeptide  
 CC contains 2 cysteine residues, where the first cysteine is not mutated; a  
 CC mutated human IgG1 immunoglobulin hinge region polypeptide, derived from  
 CC (a) having 3 or more cysteine residues, where the mutated human IgG1  
 CC immunoglobulin hinge region polypeptide contains no more than one  
 CC cysteine residue; and a mutated human IgG1 immunoglobulin hinge region  
 CC polypeptide, derived from (a) having 3 or more cysteine residues; where  
 CC the mutated human IgG1 immunoglobulin hinge region polypeptide contains  
 CC no cysteine residues. The binding domain-immunoglobulin fusion protein is  
 CC capable of at least one immunological activity comprising antibody  
 CC dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The  
 CC binding domain polypeptide is capable of specifically binding to an  
 CC antigen. Also included are an isolated polynucleotide encoding the  
 CC binding domain-immunoglobulin fusion protein, a recombinant expression  
 CC construct comprising the polynucleotide (operably linked to a promoter),  
 CC a host cell transformed or transfected with a recombinant expression  
 CC construct, producing the binding domain-immunoglobulin fusion protein, a  
 CC pharmaceutical composition comprising the binding domain-immunoglobulin  
 CC fusion protein or polynucleotide and a carrier, and treating a subject  
 CC having or suspected of having a malignant condition or a B-cell disorder.  
 CC The binding domain-immunoglobulin fusion protein is useful for treating a  
 CC subject having or suspected of having a malignant condition or a B-cell  
 CC disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis,  
 CC myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple  
 CC sclerosis or autoimmune disease. The present sequence is a binding domain  
 CC -immunoglobulin fusion protein-associated protein sequence. Note: The  
 CC sequence data for this patent formed part of the printed specification  
 CC and is also available in electronic format directly from USPTO at

CC CH2 constant region polypeptide that is fused to the hinge region  
 CC polypeptide, and an immunoglobulin heavy chain CH3 constant region  
 CC polypeptide that is fused to the CH2 constant region polypeptide. The  
 CC hinge region polypeptide comprises: a wild-type human IgG1 immunoglobulin  
 CC hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge  
 CC region polypeptide, derived from (a) having 3 or more cysteine residues;  
 CC where the mutated human IgG1 immunoglobulin hinge region polypeptide  
 CC contains 2 cysteine residues, where the first cysteine is not mutated; a  
 CC mutated human IgG1 immunoglobulin hinge region polypeptide, derived from  
 CC (a) having 3 or more cysteine residues, where the mutated human IgG1  
 CC immunoglobulin hinge region polypeptide contains no more than one  
 CC cysteine residue; and a mutated human IgG1 immunoglobulin hinge  
 CC polypeptide, derived from (a) having 3 or more cysteine residues; where  
 CC the mutated human IgG1 immunoglobulin hinge region polypeptide contains  
 CC no cysteine residues. The binding domain-immunoglobulin fusion protein is  
 CC capable of at least one immunological activity comprising antibody  
 CC dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The  
 CC binding domain polypeptide is capable of specifically binding to an  
 CC antigen. Also included are an isolated polynucleotide encoding the  
 CC binding domain-immunoglobulin fusion protein, a recombinant expression  
 CC construct comprising the polynucleotide (operably linked to a promoter),  
 CC a host cell transformed or transfected with a recombinant expression  
 CC construct, producing the binding domain-immunoglobulin fusion protein, a  
 CC pharmaceutical composition comprising the binding domain-immunoglobulin  
 CC fusion protein or polynucleotide and a carrier, and treating a subject  
 CC having or suspected of having a malignant condition or a B-cell disorder.  
 CC The binding domain-immunoglobulin fusion protein is useful for treating a  
 CC subject having or suspected of having a malignant condition or a B-cell  
 CC disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis,  
 CC myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple  
 CC sclerosis or autoimmune disease. The present sequence is a binding domain  
 CC -immunoglobulin fusion protein-associated protein sequence. Note: The  
 CC sequence data for this patent formed part of the printed specification  
 CC and is also available in electronic format directly from USPTO at  
 CC seqdata.uspto.gov/sequence.html?docID=20030118592. The authors have not  
 CC identified the sequences in the printed specification by their SEQ ID  
 CC number therefore none of the sequences can be explicitly identified.  
 XX Sequence 499 AA;

Query Match 100.0%; Score 1263; DB 7; Length 499;  
 Best Local Similarity 100.0%; Pred. No. 3,8e-91;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHCPCPAPELGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60  
 Db 268 EPKSCDKTHCPCPAPELGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 327  
 QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
 Db 328 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 387  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEGSSNQPPNNVKTTP 180  
 Db 388 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEGSSNQPPNNVKTTP 447  
 QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCVSVHAEALHNHYTQKSLSLSPGK 232  
 Db 448 PVLDSGSPFLYSKLTVDKSRWQGNVFCVSVHAEALHNHYTQKSLSLSPGK 499

RESULT 247

ADM42729

ID ADM42729 standard; protein; 499 AA.

XX ADM42729;

DT 03-JUN-2004 (first entry)

XX 2H7scFv-Ig, an Ig fusion protein for CD20.

XX Mouse; antibody; single chain antibody; scFv;

KW binding domain-immunoglobulin fusion protein;

KW immunoglobulin hinge region; heavy chain CH2 constant region;  
 KW heavy chain CH3 constant region;  
 KW antibody dependent cell-mediated cytotoxicity; complement fixation; IgA;  
 KW IgG; CD19; CD20; CD37; CD40; L6; CD154; malignant condition; cancer;  
 KW B-cell disorder; autoimmune; rheumatoid arthritis; myasthenia gravis;  
 KW Grave's disease; type I diabetes mellitus; multiple sclerosis;  
 KW autoimmune disease; human.  
 XX Mus musculus.  
 OS Homo sapiens.  
 OS Synthetic.  
 OS Chimeric.  
 XX US2003133939-A1.  
 PD 17-JUL-2003.  
 XX 17-JAN-2002; 2002US-00053530.  
 PF 17-JAN-2002; 2002US-00053530.  
 PR 17-JAN-2002; 2002US-00053530.  
 XX (GENE-) GENE-CRAFT INC.  
 PA Ledbetter JA, Hayden-Ledbetter MS;  
 XX WPI; 2003-843256/78.  
 DR N-PSDB; ADM42716.  
 XX New binding domain-immunoglobulin fusion protein for treating malignant  
 PT conditions (e.g. cancer) or B-cell disorders, comprises a binding domain  
 PT polypeptide and immunoglobulin heavy chain CH2 and CH3 constant region  
 PT polypeptides.  
 XX Example 1; SEQ ID NO 15; 80pp; English.  
 XX The invention relates to a binding domain-immunoglobulin fusion protein  
 CC comprising a binding domain polypeptide that is fused to an  
 CC immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain  
 CC CH2 constant region polypeptide that is fused to the hinge region  
 CC polypeptide, and an immunoglobulin heavy chain CH3 constant region  
 CC polypeptide that is fused to the CH2 constant region polypeptide. The  
 CC fusion protein is capable of at least one immunological activity such as  
 CC antibody dependent cell-mediated cytotoxicity and complement fixation,  
 CC and is capable of specifically binding to an antigen. The hinge region  
 CC polypeptide is selected from a mutated hinge region polypeptide that  
 CC contains no cysteine residues (and that is derived from a wild-type  
 CC immunoglobulin hinge region polypeptide having one or more cysteine  
 CC residues), a mutated hinge region polypeptide that contains one cysteine  
 CC residue (nd that is derived from a wild-type immunoglobulin hinge region  
 CC polypeptide having two or more cysteine residues), a wild-type human  
 CC immunoglobulin (Ig)A hinge region polypeptide, a mutated human IgA hinge  
 CC region polypeptide that contains no cysteine residues (and that is  
 CC derived from a wild-type human IgA region polypeptide) and a mutated  
 CC human IgA hinge region polypeptide that contains one cysteine residue  
 CC (and that is derived from a wild-type human IgA region polypeptide). Also  
 CC included are an isolated polynucleotide encoding the novel fusion  
 CC protein, a recombinant expression construct comprising the  
 CC polynucleotide, a host cell transformed or transfected with the  
 CC expression construct, producing the novel fusion protein (comprising  
 CC culturing the host cell under conditions that permit expression of the  
 CC novel fusion protein and isolating the binding domain-immunoglobulin  
 CC fusion protein from the host cell culture), a pharmaceutical composition  
 CC comprising the novel fusion protein in combination with a carrier and  
 CC treating a subject having or suspected of having a malignant condition or  
 CC a B-cell disorder (comprising administering to the patient an amount of  
 CC the novel fusion protein). The mutated hinge region polypeptide exhibits  
 CC a reduced ability to dimerize, relative to a wild-type human  
 CC immunoglobulin G hinge region polypeptide. The binding domain polypeptide  
 CC comprises at least one immunoglobulin variable region polypeptide  
 CC selected from an immunoglobulin light chain variable region polypeptide  
 CC and an immunoglobulin heavy chain variable region polypeptide, and  
 CC optionally at least one linker peptide that is fused to the  
 CC immunoglobulin variable region polypeptide. The immunoglobulin variable

and constant region polypeptides are derived from a human immunoglobulin. The immunoglobulin heavy chain constant region CH2 and CH3 polypeptides are of an isotype selected from human IgG and human IgA. The antigen is selected from CD19, CD20, CD37, CD40 and L6. The binding domain polypeptide comprises a CD154 extracellular domain, and optionally, at least one immunoglobulin variable region polypeptide (e.g. mouse V<sub>H</sub> and V<sub>H</sub> regions forming single chain antibodies which bind to one of the above antigens). The composition and methods are useful in treating malignant conditions (e.g. cancer) and B-cell disorders, including disease characterised by autoantibody production, such as rheumatoid arthritis, myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple sclerosis or autoimmune diseases. The present sequence represents a fusion protein of the invention comprising mouse antibody V<sub>H</sub> and V<sub>H</sub> regions fused to either human Immunoglobulin sequence or CD154 extracellular domain.

Sequence 499 AA;

```
Query Match      100.0%; Score 1263; DB 7; Length 499;
Best Local Similarity 100.0%; Pred. No. 3.8e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

Db 268 EPKSCDKTHTCPPCPAPELGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 327

QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120

328 NWYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 387

Qy 121 ISKAKGQPREPQVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180

Db 388 ISKAKGQPREPQVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 447

QY 181 PVLSDGSSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYIQKSLSLSPGK 232

DB 448 FVLDSDGSEFFLIYSKLIVDKSRWQQGNVFCSCVMHEALHNHYIQKSLSLSPGK 499

RESULT 248

ADD25679  
ID ADD25679 standard; protein; 500 AA.

AC ADD25679;

DT 15-JAN-2004 (first entry)

DE Binding domain-immunoglobulin fusion protein-associated protein #114.

Binding domain; immunoglobulin; fusion protein; cytostatic;  
antiarrhythmic; immunosuppressive; antidiabetic; antithyroid;  
neuroprotective; hinge region; immunoglobulin heavy chain;  
CH2 constant region; CH3 constant region; IgG1; complement fixation;  
antibody dependent cell-mediated cytotoxicity; ADCC; malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma;  
rheumatoid arthritis; myasthenia gravis; Grave's disease;  
type 1 diabetes mellitus; multiple sclerosis; autoimmune disease.

OS Unidentified.

PN US2003118592-A1.

PD 26-JUN-2003.

PF 25-JUL-2002; 2002US-00207655.

PR 17-JAN-2001; 2001US-0367358P.

PR 03-JUN-2002; 2002US-0385691P.  
yy

PA (GENE-) GENE CRAFT INC.  
XX

PT Ledbetter JA, Hayden-

XX

DR WPI; 2003-801317/75.

PT New binding domain-immunoglobulin fusion protein, useful for treating a  
PT subject having or suspected of having a malignant condition or a B-cell  
PT disorder, e.g. melanoma, Grave's disease or autoimmune disease.

PS Disclosure; SEQ ID NO 240; 157pp; English.

The invention relates to a binding domain-immunoglobulin fusion protein comprising a binding domain polypeptide that is fused to an immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain CH2 constant region polypeptide that is fused to the hinge region polypeptide, and an immunoglobulin heavy chain CH3 constant region polypeptide that is fused to the CH2 constant region polypeptide. The hinge region polypeptide comprises: a wild-type human IgG1 immunoglobulin hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge region polypeptide, derived from (a) having 3 or more cysteine residues; where the mutated human IgG1 immunoglobulin hinge region polypeptide contains 2 cysteine residues, where the first cysteine is not mutated; a mutated human IgG1 immunoglobulin hinge region polypeptide, derived from (a) having 3 or more cysteine residues, where the mutated human IgG1 immunoglobulin hinge region polypeptide contains no more than one cysteine residue; and a mutated human IgG1 immunoglobulin hinge region polypeptide, derived from (a) having 3 or more cysteine residues; where the mutated human IgG1 immunoglobulin hinge region polypeptide contains no cysteine residues. The binding domain-immunoglobulin fusion protein is capable of at least one immunological activity comprising antibody dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The binding domain polypeptide is capable of specifically binding to an antigen. Also included are an isolated polynucleotide encoding the binding domain-immunoglobulin fusion protein, a recombinant expression construct comprising the polynucleotide (operably linked to a promoter), a host cell transformed or transfected with a recombinant expression construct, producing the binding domain-immunoglobulin fusion protein, a pharmaceutical composition comprising the binding domain-immunoglobulin fusion protein or polynucleotide and a carrier, and treating a subject having or suspected of having a malignant condition or a B-cell disorder. The binding domain-immunoglobulin fusion protein is useful for treating a subject having or suspected of having a malignant condition or a B-cell disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis, myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple sclerosis or autoimmune disease. The present sequence is a binding domain-immunoglobulin fusion protein-associated protein sequence. Note: The sequence data for this patent formed part of the printed specification and is also available in electronic format directly from USPTO at [seqdata.uspto.gov/sequence.html?DocID=20030118592](http://seqdata.uspto.gov/sequence.html?DocID=20030118592). The authors have not identified the sequences in the printed specification by their SEQ ID number therefore none of the sequences can be explicitly identified.

Sequence 500 AA;

Query Match	100.0%;	Score 1263;	DB 7;	Length 500;
Best Local Similarity	100.0%;	Pred. No. 3.8e-91;		
Matches 232; Conservative	0;	Mismatches	0;	Indels

1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

db 269 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 328

Qy 61 NWYDGEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Db 329 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 388

QY 121 ISKAKQPREPQWTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKPTIP 180

DB 389 ISKAKGQPREPQVYITLPPFSRDELIRNQVSLICLVKGFIPSDIAVEWESNGQFENNINILF 444

QY I8I FVLDSDG\$FLLISNTI VDK\$KWKQGNVF\$C\$VNTHE\$ALHNNH I IQ\$K\$T\$T\$T\$F\$G\$K 252

[illegible]

## RESULT 249

ADM97493  
ID ADM97493 standard; protein; 502 AA.  
XX  
AC  
XX ADM97493;  
XX  
DT 01-JUL-2004 (first entry)  
XX  
DE CD1d-IgG-avidin complex IgG1 fragment SEQ ID NO: 16.  
XX  
XX CD1d complex; cytostatic; antiinflammatory; cancer; autoimmune disease;  
KW inflammatory disease; immunosuppressive; antimicrobial; neuroprotective;  
KW antidiabetic; antiarthritic; antirheumatic; ophthalmological;  
KW gastrointestinal; nephrotropic; dermatological; hepatotropic;  
KW beta2-microglobulin.  
XX  
OS Unidentified.

XX

XX WO2004029206-A2.

XX PD 08-APR-2004.

XX PF 26-SEP-2003; 2003WO-US030238.

XX PR 27-SEP-2002; 2002EP-00405838.

XX PA (VACC-) VACCINEX INC.

XX PA (ROBE/) ROBERT B.

XX PA (DOND/) DONDA A.

XX PA (CESS/) CESSON V.

XX PA (MACH/) MACH J.

XX PI Robert B, Donda A, Cesson V, Mach J, Zauderer M;

XX DR WPI; 2004-316095/29.

XX DR N-PSDB; ADM97492.

XX  
XX New compound comprising CD1d complexes and an antibody specific for a  
PT cell surface marker, useful for preventing or treating tumors and  
PT autoimmune/inflammatory or infectious diseases, e.g. multiple sclerosis,  
PT diabetes or psoriasis.  
XX

XX Example 4; Page 78; 152pp; English.

XX  
XX The present invention relates to a compound comprising one or more CD1d  
CC complexes and an antibody or its fragment specific for a cell surface  
CC marker. The CD1d complexes comprise a CD1d and a beta2-microglobulin  
CC molecule, and are linked to the antibody or its fragment. The composition  
CC and methods are useful for preventing or treating tumors and  
CC autoimmune/inflammatory or infectious diseases, such as multiple  
CC sclerosis, type I diabetes, ankylosing spondylitis, acute anterior  
CC uveitis, atrophic gastritis, Goodpasture's syndrome, Grave's disease,  
CC Hashimoto's thyroiditis, myasthenia gravis, psoriasis, psoriatic  
CC arthritis, rheumatoid arthritis, systemic lupus erythematosus, systemic  
CC sclerosis, pemphigus vulgaris, pernicious anemia, primary biliary  
CC cirrhosis, ulcerative colitis or autoimmune hepatitis. The present  
XX sequence is a polypeptide used in the exemplification of the invention.

XX SQ Sequence 502 AA;

Query Match

Best Local Similarity 100.0%; Score 1263; DB 8; Length 502;

Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHCPCPAPPELLGGSVFLFPPPKDTLMISRTPEVTCVVDVSHEDDEVKF 60  
DB 123 EPKSCDKTHCPCPAPPELLGGSVFLFPPPKDTLMISRTPEVTCVVDVSHEDDEVKF 182  
QY 61 NWYVDGVEVHNATKPREQYNSYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 120  
DB 183 NWYVDGVEVHNATKPREQYNSYRVSVLTVLHODWLNKGKCKVSNKALPAPIEKT 242  
QY 121 ISKAKGPPEPVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180

Db 243 ISKAKGPPEPVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 302  
QY 181 FVLDSGGSFFLYSKLTVDKSRWQQGNVSCFVSVMHEALHNHYTQKSLSLSPGK 232  
Db 303 FVLDSGGSFFLYSKLTVDKSRWQQGNVSCFVSVMHEALHNHYTQKSLSLSPGK 354

## RESULT 250

ADD25787

ID ADD25787 standard; protein; 504 AA.

XX

AC ADD25787;

XX DT 15-JAN-2004 (first entry)

XX

XX Binding domain-immunoglobulin fusion protein-associated protein #160.

XX Binding domain; immunoglobulin; fusion protein; cytostatic;

KW antiarthritic; immunosuppressive; antidiabetic; antithyroid;

KW neuroprotective; hinge region; immunoglobulin heavy chain;

KW CH2 constant region; CH3 constant region; IgG1;

KW antibody dependent cell-mediated cytotoxicity; ADCC; complement fixation;

KW malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma;

KW rheumatoid arthritis; myasthenia gravis; Grave's disease;

KW type I diabetes mellitus; multiple sclerosis; autoimmune disease.

XX Unidentified.

OS

XX US2003118592-A1.

XX PN

XX PD 26-JUN-2003.

XX PF 25-JUL-2002; 2002US-00207655.

XX PR 17-JAN-2001; 2001US-0367358P.

XX PR 17-JAN-2002; 2002US-00053530.

XX PR 03-JUN-2002; 2002US-0385691P.

XX PA (GENE-) GENE-CRAFT INC.

XX

PI Ledbetter JA, Hayden-Ledbetter MS, Thompson PA;

XX WPI; 2003-801317/75.

XX DR

XX New binding domain-immunoglobulin fusion protein, useful for treating a  
PT subject having or suspected of having a malignant condition or a B-cell  
PT disorder, e.g. melanoma, Grave's disease or autoimmune disease.  
XX

XX Disclosure; SEQ ID NO 348; 157pp; English.

XX The invention relates to a binding domain-immunoglobulin fusion protein  
CC comprising a binding domain polypeptide that is fused to an  
CC immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain  
CC polypeptide, and an immunoglobulin heavy chain CH3 constant region  
CC polypeptide, and a polypeptide that is fused to the hinge region  
CC polypeptide that is fused to the CH2 constant region polypeptide. The  
CC hinge region polypeptide comprises: a wild-type human IgG1 immunoglobulin  
CC hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge  
CC region polypeptide, derived from (a) having 3 or more cysteine residues;  
CC where the mutated human IgG1 immunoglobulin hinge region polypeptide  
CC contains 2 cysteine residues, where the first cysteine is not mutated; a  
CC mutated human IgG1 immunoglobulin hinge region polypeptide, derived from  
CC (a) having 3 or more cysteine residues, where the mutated human IgG1  
CC immunoglobulin hinge region polypeptide contains no more than one  
CC cysteine residue; and a mutated human IgG1 immunoglobulin hinge region  
CC polypeptide, derived from (a) having 3 or more cysteine residues; where  
CC the mutated human IgG1 immunoglobulin hinge region polypeptide contains  
CC no cysteine residues. The binding domain-immunoglobulin fusion protein is  
CC capable of at least one immunological activity comprising antibody  
CC dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The  
CC binding domain polypeptide is capable of specifically binding to an  
CC antigen. Also included are an isolated polynucleotide encoding the

CC binding domain-immunoglobulin fusion protein, a recombinant expression  
CC construct comprising the polynucleotide (operably linked to a promoter),  
CC a host cell transformed or transfected with a recombinant expression  
CC construct, producing the binding domain-immunoglobulin fusion protein, a  
CC pharmaceutical composition comprising the binding domain-immunoglobulin  
CC fusion protein or polynucleotide and a carrier, and treating a subject  
CC having or suspected of having a malignant condition or a B-cell disorder.  
CC The binding domain-immunoglobulin fusion protein is useful for treating a  
CC subject having or suspected of having a malignant condition or a B-cell  
CC disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis,  
CC myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple  
CC sclerosis or autoimmune disease. The present sequence is a binding domain  
CC -immunoglobulin fusion protein-associated protein sequence. Note: The  
CC sequence data for this patent formed part of the printed specification  
CC and is also available in electronic format directly from USPTO at  
CC seqdata.uspto.gov/sequence.html?docid=20030118592. The authors have not  
CC identified the sequences in the printed specification by their SEQ ID  
CC number therefore none of the sequences can be explicitly identified.

XX  
SQ Sequence 504 AA;

Query Match 100.0%; Score 1263; DB 7; Length 504;  
Best Local Similarity 100.0%; Pred. No. 3.8e-91;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
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DB |||||||  
  
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Search completed: February 10, 2005, 06:42:11  
Job time : 91 secs

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: February 10, 2005, 06:40:32 ; Search time 52 Seconds

(without alignments)  
1457.804 Million cell updates/sec

Title: US-10-617-619A-7

Perfect score: 1263

Sequence: 1.EPKSCDKHTCPPCPAPELL.....MHEALHHYTKSLSPGK 232

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1376975 seqs, 326749119 residues

Total number of hits satisfying chosen parameters: 175

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 100%

Maximum Match 100%

Listing first 500 summaries

Database : Published Applications AA:\*

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2: /cgn2\_6/ptodata/2/pubpaa/PCT\_NEW\_PUB.pep.\*  
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19: /cgn2\_6/ptodata/2/pubpaa/US60\_NEW\_PUB.pep.\*  
20: /cgn2\_6/ptodata/2/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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1	1263	100.0	232	9	US-09-996-357-10
2	1263	100.0	232	10	US-09-389-782-1
3	1263	100.0	232	16	US-10-617-619-7
4	1263	100.0	232	16	US-10-761-593A-26
5	1263	100.0	235	14	US-10-207-655-208
6	1263	100.0	247	9	US-09-996-357-13
7	1263	100.0	251	14	US-10-008-063-18
8	1263	100.0	251	14	US-10-152-363A-6
9	1263	100.0	267	9	US-09-996-357-12
10	1263	100.0	288	10	US-09-822-851B-14
11	1263	100.0	288	14	US-10-119-637A-14
12	1263	100.0	329	15	US-10-370-749-48
13	1263	100.0	330	10	US-09-995-898A-15
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					Sequence 1, Appl
					Sequence 7, Appl
					Sequence 26, Appl
					Sequence 208, Appl
					Sequence 13, Appl
					Sequence 18, Appl
					Sequence 6, Appl
					Sequence 12, Appl
					Sequence 14, Appl
					Sequence 14, Appl
					Sequence 48, Appl
					Sequence 15, Appl

14	1263	100.0	330	10	US-09-892-949-38	Sequence 38, Appl
15	1263	100.0	330	13	US-10-047-542-20	Sequence 20, Appl
16	1263	100.0	330	14	US-10-269-805-68	Sequence 68, Appl
17	1263	100.0	330	14	US-10-310-719-8	Sequence 8, Appl
18	1263	100.0	330	14	US-10-112-582-1	Sequence 1, Appl
19	1263	100.0	330	14	US-10-320-231A-81	Sequence 81, Appl
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21	1263	100.0	330	15	US-10-408-901-2	Sequence 2, Appl
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25	1263	100.0	330	16	US-10-679-620-58	Sequence 58, Appl
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27	1263	100.0	330	16	US-10-479-326-1	Sequence 1, Appl
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29	1263	100.0	330	17	US-10-886-838-6	Sequence 6, Appl
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31	1263	100.0	330	17	US-10-822-300-7	Sequence 7, Appl
32	1263	100.0	331	9	US-09-761-413-2	Sequence 2, Appl
33	1263	100.0	331	14	US-10-341-836-2	Sequence 2, Appl
34	1263	100.0	332	10	US-09-990-586-98	Sequence 98, Appl
35	1263	100.0	332	14	US-10-310-113-167	Sequence 167, Appl
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37	1263	100.0	333	15	US-10-272-899A-8	Sequence 8, Appl
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43	1263	100.0	371	14	US-10-097-044A-7	Sequence 7, Appl
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49	1263	100.0	388	15	US-10-362-591-4	Sequence 4, Appl
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51	1263	100.0	404	9	US-09-948-018-16	Sequence 16, Appl
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55	1263	100.0	444	14	US-10-150-475A-6	Sequence 6, Appl
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57	1263	100.0	444	16	US-10-645-215-6	Sequence 6, Appl
58	1263	100.0	445	14	US-10-320-231A-79	Sequence 79, Appl
59	1263	100.0	445	15	US-10-408-901-34	Sequence 34, Appl
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61	1263	100.0	446	15	US-10-408-901-30	Sequence 30, Appl
62	1263	100.0	446	15	US-10-408-901-38	Sequence 38, Appl
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64	1263	100.0	446	15	US-10-408-901-50	Sequence 50, Appl
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72	1263	100.0	448	15	US-10-449-566-107	Sequence 107, Appl
73	1263	100.0	451	9	US-09-875-398-17	Sequence 17, Appl
74	1263	100.0	451	9	US-09-822-638A-26	Sequence 26, Appl
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76	1263	100.0	451	17	US-10-849-615-69	Sequence 69, Appl
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79	1263	100.0	462	10	US-09-773-877A-18	Sequence 18, Appl
80	1263	100.0	465	15	US-10-404-724-8	Sequence 8, Appl
81	1263	100.0	465	15	US-10-404-724-23	Sequence 23, Appl
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83	1263	100.0	465	17	US-10-816-276-4	Sequence 4, Appl
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85	1263	100.0	465	17	US-10-816-276-21	Sequence 21, Appl
86	1263	100.0	467	15	US-10-108-260A-4293	Sequence 4293, Ap



Publication No. US20030144187A1  
GENERAL INFORMATION:  
APPLICANT: Wooden, Scott K.  
APPLICANT: Mann, Michael B.  
APPLICANT: Dunstan, Colin R.  
TITLE OF INVENTION: OPG Fusion Protein Compositions and Methods  
FILE REFERENCE: A-604  
CURRENT APPLICATION NUMBER: US/09/389,782  
CURRENT FILING DATE: 1999-09-03  
NUMBER OF SEQ ID NOS: 50  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 1  
LENGTH: 232  
TYPE: PRT  
ORGANISM: Human  
US-09-389-782-1

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Best Local Similarity 100.0%; Pred. No. 1e-92;  
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RESULT 3  
US-10-617-619-7  
Sequence 7, Application US/10617619  
Publication No. US20040110929A1  
GENERAL INFORMATION:  
APPLICANT: Bjorn, Soren E  
APPLICANT: Nicolaisen, Else M  
APPLICANT: Jorgensen, Anker S  
TITLE OF INVENTION: TF Binding Compound  
FILE REFERENCE: 6455.200-US  
CURRENT APPLICATION NUMBER: US/10/617,619  
CURRENT FILING DATE: 2003-07-11  
PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099  
PRIOR FILING DATE: 2002-07-12  
PRIOR APPLICATION NUMBER: US 60/404,568  
PRIOR FILING DATE: 2002-08-19  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: PatentIn version 3.2  
SEQ ID NO 7  
LENGTH: 232  
TYPE: PRT  
ORGANISM: Human  
US-10-617-619-7

Query Match 100.0%; Score 1263; DB 16; Length 232;  
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DB 181 PVLDSDGSPFLYSLKLTVDKSRWQOGNVSFCSVMHEALHNYHTOKSLSPGK 232

## RESULT 4

US-10-761-593A-26  
Sequence 26, Application US/10761593A  
Publication No. US20040175824A1  
GENERAL INFORMATION:  
APPLICANT: Sun, Lee-Hwei K  
APPLICANT: Sun, Bill N  
APPLICANT: Sun, Cecily R  
TITLE OF INVENTION: Fc fusion proteins of human erythropoietin with high biological  
FILE REFERENCE: 02SUN2001-A  
CURRENT APPLICATION NUMBER: US/10/761,593A  
CURRENT FILING DATE: 2004-01-21  
PRIOR APPLICATION NUMBER: 09/932812  
PRIOR FILING DATE: 2001-08-17  
NUMBER OF SEQ ID NOS: 28  
SOFTWARE: PatentIn version 3.2  
SEQ ID NO 26  
LENGTH: 232  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-761-593A-26

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DB 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
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## RESULT 5

US-10-207-655-208  
Sequence 208, Application US/10207655  
Publication No. US20030118592A1  
GENERAL INFORMATION:  
APPLICANT: Ledbetter, Jeffrey A.  
APPLICANT: Hayden-Ledbetter, Martha S.  
TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS  
FILE REFERENCE: 390069.401C1  
CURRENT APPLICATION NUMBER: US/10/207,655  
CURRENT FILING DATE: 2002-07-25  
NUMBER OF SEQ ID NOS: 426  
SOFTWARE: PatentIn version 3.0  
SEQ ID NO 208  
LENGTH: 235  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Fusion polypeptide

US-10-207-655-208

Query Match	100.0%;	Score 1263;	DB 14;	Length 235;
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121	ISKAGQPREPOVYITLPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGGOPENNYKTP	180		
124	ISKAGQPREPOVYITLPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGGOPENNYKTP	183		
181	PVLDSGDGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK	232		
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## RESULT 6

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US-09-996-357-13
; Sequence 13, Application US/09996357
; Patent No. US20020133001A1
; GENERAL INFORMATION:
; APPLICANT: Gefter, Malcolm L
; APPLICANT: Isreal, David I
; APPLICANT: Joyal, John L
; APPLICANT: Gosselin, Michael
; TITLE OF INVENTION: THERAPEUTIC AGENTS AND METHODS OF USE THEREOF FOR
; FILE REFERENCE: PPI-105
; CURRENT APPLICATION NUMBER: US/09/996,357
; CURRENT FILING DATE: 2001-11-27
; PRIOR APPLICATION NUMBER: 60/253,302
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/250,198
; PRIOR FILING DATE: 2000-11-29
; PRIOR APPLICATION NUMBER: 60/257,186
; PRIOR FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 13
; LENGTH: 247
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-996-357-13

```

## RESULT 7

US-10-008-063-18

```

: Sequence 18, Application US/10008063
: Publication No.: US20030092164A1
:
: GENERAL INFORMATION:
:
: APPLICANT: Gross, Jane A.
: APPLICANT: Xu, Wenfeng
: APPLICANT: Henne, Randal M.
: APPLICANT: Grant, Francis, J.
:
: TITLE OF INVENTION: Human Tumor Necrosis Factor Receptor
:
: FILE REFERENCE: 00-103
:
: CURRENT APPLICATION NUMBER: US/10/008,063
:
: CURRENT FILING DATE: 2001-11-05
:
: NUMBER OF SEQ ID NOS: 46
:
: SOFTWARE: FastSeq for Windows Version 4.0
:
: SEQ ID NO 18
:
: LENGTH: 251
:
: TYPE: PRT
:
: ORGANISM: Homo sapiens
:
: US-10-008-063-18

```

## RESULT 8

```

US-10-152-363A-6
; Sequence 6, Application US/10152363A
; Publication No. US20030103986A1
; GENERAL INFORMATION:
; APPLICANT: Rixon, Mark W.
; APPLICANT: Gross, Jane A.
; TITLE OF INVENTION: TAC1-Immunoglobulin Fusion Proteins
; FILE REFERENCE: 01-20
; CURRENT APPLICATION NUMBER: US/10/152,363A
; CURRENT FILING DATE: 2002-05-20
; PRIOR APPLICATION NUMBER: 60/293,343
; PRIOR FILING DATE: 2001-05-24
; NUMBER OF SEQ ID NOS: 70
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 251
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-152-363A-6

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Qy	1	BPKSCDKTHTCCPPC	PAPPELLGGPSVFLP	PPKPKOTLMISRTPEVT	CVVVVDVSHEDPEVKF	60
Db	56	BPKSCDKTHTCCPPC	PAPPELLGGPSVFLP	PPKPKDTLMISRTPEVT	CVVVVDVSHEDPEVKF	115
Qy	61	NWYDGVGVHNAKTKPR	EEQYNSTYYRVSVLTVL	HQDWLNGKEYCKIKSNKALPAPIEKT	120	
Db	116	NWYDGVGVHNAKTKPR	EEQYNSTYYRVSVLTVL	HQDWLNGKEYCKIKSNKALPAPIEKT	175	
Qy	121	ISKAKGQPREPOVYITLP	SRDELTKNQVSLTCLVLKG	FYPSDIAVESWGQPENNYKTPP	180	
Db	176	ISKAKGQPREPOVYITLP	SRDELTKNQVSLTCLVLKG	FYPSDIAVESWGQPENNYKTPP	235	
Qy	181	PVLDSGDGFIFYSKULTV	DKRWQQGNVFCSVMHEALNHNHYTK	SLSLSPGK	232	
Db	236	PVLDSGDGFIFYSKULTV	DKRWQQGNVFCSVMHEALNHNHYTK	SLSLSPGK	287	

```

RESULT 12
US-10-370-749-48
; Sequence 48, Application US/10370749
; Publication No. US20040002587A1
; GENERAL INFORMATION:
; APPLICANT: Watkins, Jeffrey D.
; APPLICANT: Allan, Barrett
; TITLE OF INVENTION: Fc Region Variants
; FILE REFERENCE: AME-07823
; CURRENT APPLICATION NUMBER: US/10/370,749
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/358,161
; PRIOR FILING DATE: 2002-02-20
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 48
; LENGTH: 329
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-370-749-48

```

RESULT 13  
US-09-995-898A-15  
; Sequence 15, Application US/09995898A  
; Publication No. US20030027253A1  
; GENERAL INFORMATION:  
; APPLICANT: Presnell, Scott R.  
; APPLICANT: Xu, Wenfeng  
; APPLICANT: No. US20030027253A1ak, Julia E.  
; APPLICANT: Whitmore, Theodore E.  
; APPLICANT: Grant, Francis J.  
; TITLE OF INVENTION: CYTOKINE RECEPTOR ZCYTOR19  
; FILE REFERENCE: 00-108  
; CURRENT APPLICATION NUMBER: US/09/995,898A  
; CURRENT FILING DATE: 2001-11-28

```

; PRIOR APPLICATION NUMBER: US 60/253,561
; PRIOR FILING DATE: 2000-11-28
; PRIOR APPLICATION NUMBER: US 60/267,211
; PRIOR FILING DATE: 2001-02-07
; NUMBER OF SEQ ID NOS: 50
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 15
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-995-898A-15

Query Match      100.0%; Score 1263; DB 10; Length 330;
Best Local Similarity 100.0%; Pred. No. 1.6e-92;
Matches 232; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

Qy      1  EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db      99  EPKSCDKTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy      61  NWYVDGVEVHNAAKTPREEQVNSTYRVSVLTVLHQDLNAGKEYCKVSNKALPAPIEKT 120
Db      159  NWYVDGVEVHNAAKTPREEQVNSTYRVSVLTVLHQDLNAGKEYCKVSNKALPAPIEKT 218

Qy      121  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
Db      219  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 278

Qy      181  PVLDSGDSFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db      279  PVLDSGDSFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330

```

```

RESULT 14
US-09-892-949-38
; Sequence 38, Application US/09892949
; Publication No. US20030096339A1
; GENERAL INFORMATION:
; APPLICANT: Sprecher, Cindy A.
; APPLICANT: Presnell, Scott R.
; APPLICANT: Gao, Zeren
; APPLICANT: Whitmore, Theodore E.
; APPLICANT: Kuijper, Joseph L.
; APPLICANT: Maurer, Mark F.
; TITLE OF INVENTION: CYTOKINE RECEPTOR ZCYTOR17
; FILE REFERENCE: 00-42
; CURRENT APPLICATION NUMBER: US/09/892,949
; CURRENT FILING DATE: 2001-06-26
; PRIOR APPLICATION NUMBER: US 60/214,282
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/214,955
; PRIOR FILING DATE: 2000-06-29
; PRIOR APPLICATION NUMBER: US 60/267,963
; PRIOR FILING DATE: 2001-08-02
; NUMBER OF SEQ ID NOS: 93
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-892-949-38

```

Query Match	100.0%;	Score 1263;	DB 10;	Length 330;
Best Local Similarity	100.0%;	Pred. No. 1.6e-92;		
Matches 232;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKD <del>TL</del> MI <del>SRT</del> PEVTCVVDVSHEDPEVKF	60	
Db	99	EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKD <del>TL</del> MI <del>SRT</del> PEVTCVVDVSHEDPEVKF	158	
Qy	61	NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPTEKT	120	
Db	159	NWYVDGVEVHNATKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPTEKT	218	



```
; Publication No. US20030166877A1
; GENERAL INFORMATION:
; APPLICANT: Glillies, Stephen
; FILE OF INVENTION: Reducing the Immunogenicity of Fusion Proteins
; FILE REFERENCE: LEX-017
; CURRENT APPLICATION NUMBER: US/10/112,582
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/280,625
; PRIOR FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 59
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: human Ig gamma heavy chain C region
US-10-112-582-1

Query Match          100.0%; Score 1263; DB 14; Length 330;
Best Local Similarity 100.0%; Pred. No. 1.6e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60
DB 99 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 158
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 159 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 278
QY 181 PVLDSDGSPFLYSLKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
DB 279 PVLDSDGSPFLYSLKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330

RESULT 19
US-10-320-231A-81
; Sequence 81, Application US/10320231A
; Publication No. US20030194405A1
; GENERAL INFORMATION:
; APPLICANT: Neben, Steven
; APPLICANT: Takeuchi, Toshihiko
; APPLICANT: Tomkinson, Adrian
; TITLE OF INVENTION: Antibody Inhibiting Stem Cell Factor Activity And Use For
; TITLE OF INVENTION: Treatment Of Asthma
; FILE REFERENCE: 7430*163
; CURRENT APPLICATION NUMBER: US/10/320,231A
; CURRENT FILING DATE: 2002-12-19
; PRIOR APPLICATION NUMBER: US 60/342,174
; PRIOR FILING DATE: 2001-12-17
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 81
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-320-231A-81

Query Match          100.0%; Score 1263; DB 14; Length 330;
Best Local Similarity 100.0%; Pred. No. 1.6e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60
DB 99 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 158
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 159 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 278
QY 181 PVLDSDGSPFLYSLKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
DB 279 PVLDSDGSPFLYSLKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330

RESULT 19
US-10-320-231A-81
; Sequence 81, Application US/10320231A
; Publication No. US20030194405A1
; GENERAL INFORMATION:
; APPLICANT: Neben, Steven
; APPLICANT: Takeuchi, Toshihiko
; APPLICANT: Tomkinson, Adrian
; TITLE OF INVENTION: Antibody Inhibiting Stem Cell Factor Activity And Use For
; TITLE OF INVENTION: Treatment Of Asthma
; FILE REFERENCE: 7430*163
; CURRENT APPLICATION NUMBER: US/10/320,231A
; CURRENT FILING DATE: 2002-12-19
; PRIOR APPLICATION NUMBER: US 60/342,174
; PRIOR FILING DATE: 2001-12-17
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 81
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-320-231A-81

Query Match          100.0%; Score 1263; DB 14; Length 330;
Best Local Similarity 100.0%; Pred. No. 1.6e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60
DB 99 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 158
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 159 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 278
QY 181 PVLDSDGSPFLYSLKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
DB 279 PVLDSDGSPFLYSLKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330
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```
; Publication No. US20030166877A1
; GENERAL INFORMATION:
; APPLICANT: Glillies, Stephen
; FILE OF INVENTION: Reducing the Immunogenicity of Fusion Proteins
; FILE REFERENCE: LEX-017
; CURRENT APPLICATION NUMBER: US/10/112,582
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/280,625
; PRIOR FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 59
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: human Ig gamma heavy chain C region
US-10-112-582-1

Query Match          100.0%; Score 1263; DB 14; Length 330;
Best Local Similarity 100.0%; Pred. No. 1.6e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60
DB 99 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 158
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 159 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 278
QY 181 PVLDSDGSPFLYSLKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
DB 279 PVLDSDGSPFLYSLKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330

RESULT 20
US-10-383-902A-6
; Sequence 6, Application US/10383902A
; Publication No. US20030224408A1
; GENERAL INFORMATION:
; APPLICANT: Hoogenboom, Henricus Renerus Jacobus Mattheus
; APPLICANT: Mullberg, Jorgen
; APPLICANT: Ladner, Robert C.
; TITLE OF INVENTION: LIGAND SCREENING AND DISCOVERY
; FILE REFERENCE: 10280-042001
; CURRENT APPLICATION NUMBER: US/10/383,902A
; CURRENT FILING DATE: 2003-03-07
; PRIOR APPLICATION NUMBER: US 60/362,403
; PRIOR FILING DATE: 2002-03-07
; NUMBER OF SEQ ID NOS: 58
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetically generated plasmid sequence
US-10-383-902A-6

Query Match          100.0%; Score 1263; DB 15; Length 330;
Best Local Similarity 100.0%; Pred. No. 1.6e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60
DB 99 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 158
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 159 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLAVGFYPSDIAVEWESNGQPENNYKTTTP 278
QY 181 PVLDSDGSPFLYSLKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
DB 279 PVLDSDGSPFLYSLKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330

RESULT 21
US-10-408-901-2
; Sequence 2, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
; APPLICANT: Boyle, William
; APPLICANT: Huang, Haichun
; APPLICANT: Elliot, Robin
; APPLICANT: Sullivan, John
; APPLICANT: Medlock, Eugene
; APPLICANT: Martin, Francis
; TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathway
; TITLE OF INVENTION: Inhibitors
; FILE REFERENCE: MBHB 01-1145-A
; CURRENT APPLICATION NUMBER: US/10/408,901
; CURRENT FILING DATE: 2003-04-07
```

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; NUMBER OF SEQ ID NOS: 76
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-901-2

Query Match      100.0%; Score 1263; DB 15; Length 330;
Best Local Similarity 100.0%; Pred. No. 1.6e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 99 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 158
QY 61 NTYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 120
Db 159 NTYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 218
QY 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 219 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 278
QY 181 PVLDSDGSFPLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 279 PVLDSDGSFPLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330

RESULT 22
US-10-420-034A-15
; Sequence 15, Application US/10420034A
; Publication No. US20040029228A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Wenfeng
; APPLICANT: Presnell, Scott R.
; APPLICANT: No. US20040029228A1ak, Julia E.
; APPLICANT: Whitmore, Theodore E.
; APPLICANT: Grant, Francis J.
; APPLICANT: Kindsvogel, Wayne R.
; APPLICANT: Klucher, Kevin M.
; TITLE OF INVENTION: CYTOKINE RECEPTOR
; FILE REFERENCE: 02-10
; CURRENT APPLICATION NUMBER: US/10/420,034A
; PRIOR FILING DATE: 2003-04-18
; PRIOR FILING DATE: 2002-04-19
; NUMBER OF SEQ ID NOS: 69
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-420-034A-15

Query Match      100.0%; Score 1263; DB 15; Length 330;
Best Local Similarity 100.0%; Pred. No. 1.6e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 99 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 158
QY 61 NTYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 120
Db 159 NTYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 218
QY 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 219 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 278
QY 181 PVLDSDGSFPLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 279 PVLDSDGSFPLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330

US-10-257-907-5
; Sequence 5, Application US/10257907
; Publication No. US20040043022A1
; GENERAL INFORMATION:
; APPLICANT: Heuer, Josef
; APPLICANT: Liu, Jingi
; APPLICANT: Na, Songqing
; APPLICANT: Song, Ho Yeong
; APPLICANT: Yang, Derek Di
; TITLE OF INVENTION: TREATING T-CELL MEDIATED DISEASES BY MODULATING DR6 ACTIVITY
; FILE REFERENCE: X-13992
; CURRENT APPLICATION NUMBER: US/10/257,907
; CURRENT FILING DATE: 2002-10-16
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-257-907-5

Query Match      100.0%; Score 1263; DB 15; Length 330;
Best Local Similarity 100.0%; Pred. No. 1.6e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 99 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 158
QY 61 NTYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 120
Db 159 NTYVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKT 218
QY 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 219 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 278
QY 181 PVLDSDGSFPLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 279 PVLDSDGSFPLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330

US-10-656-769-2
; Sequence 2, Application US/10656769
; Publication No. US20040097712A1
; GENERAL INFORMATION:
; APPLICANT: Varnum, Brian
; APPLICANT: Witte, Alison
; APPLICANT: Vezina, Chris
; APPLICANT: Wong, Lu Min
; APPLICANT: Qian, Xueming
; TITLE OF INVENTION: Therapeutic Human Anti-IL-IR Monoclonal Antibody
; FILE REFERENCE: 01.1554
; CURRENT APPLICATION NUMBER: US/10/656,769
; CURRENT FILING DATE: 2003-09-05
; NUMBER OF SEQ ID NOS: 79
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-656-769-2

Query Match      100.0%; Score 1263; DB 15; Length 330;
Best Local Similarity 100.0%; Pred. No. 1.6e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60
```

Db 99 EPKSCDKTHTCCPCPAPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 159 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 219 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTKSLSLSPGK 232  
Db 279 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTKSLSLSPGK 330

## RESULT 25

US-10-679-620-58  
; Sequence 58, Application US/10679620  
; Publication No. US20040110930A1  
; GENERAL INFORMATION:  
; APPLICANT: Large Scale Biology  
; APPLICANT: Reini, Stephen J.  
; APPLICANT: Edwards, Patricia C.  
; TITLE OF INVENTION: MULTIMERIC PROTEIN ENGINEERING  
; FILE REFERENCE: 34150-004A  
; CURRENT APPLICATION NUMBER: US/10/679,620  
; CURRENT FILING DATE: 2003-10-03  
; PRIOR APPLICATION NUMBER: 60/415,940  
; PRIOR FILING DATE: 2002-10-03  
; NUMBER OF SEQ ID NOS: 122  
; SOFTWARE: Patent in version 3.2  
; SEQ ID NO 58  
; LENGTH: 330  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: PhCTOPO, see Example 15  
US-10-679-620-58

Query Match 100.0%; Score 1263; DB 16; Length 330;  
Best Local Similarity 100.0%; Pred. No. 1.6e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 99 EPKSCDKTHTCCPCPAPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 159 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 219 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTKSLSLSPGK 232  
Db 279 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTKSLSLSPGK 330

## RESULT 26

US-10-772-531-38  
; Sequence 38, Application US/10772531  
; Publication No. US2004014242A1  
; GENERAL INFORMATION:  
; APPLICANT: Sprecher, Cindy A.  
; APPLICANT: Presnell, Scott R.  
; APPLICANT: Gao, Zeren  
; APPLICANT: Whitmore, Theodore E.  
; APPLICANT: Kujper, Joseph L.  
; APPLICANT: Maurer, Mark F.  
; TITLE OF INVENTION: CYTOKINE RECEPTOR ZCYTOR17

FILE REFERENCE: 00-42  
; CURRENT APPLICATION NUMBER: US/10/772,531  
; CURRENT FILING DATE: 2004-02-05  
; PRIOR APPLICATION NUMBER: US/09/892,949  
; PRIOR FILING DATE: 2001-06-26  
; PRIOR APPLICATION NUMBER: US 60/214,282  
; PRIOR FILING DATE: 2000-06-26  
; PRIOR APPLICATION NUMBER: US 60/214,955  
; PRIOR FILING DATE: 2000-06-29  
; PRIOR APPLICATION NUMBER: US 60/267,963  
; PRIOR FILING DATE: 2001-08-02  
; NUMBER OF SEQ ID NOS: 93  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 38  
; LENGTH: 330  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-772-531-38

Query Match 100.0%; Score 1263; DB 16; Length 330;  
Best Local Similarity 100.0%; Pred. No. 1.6e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 99 EPKSCDKTHTCCPCPAPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 159 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 219 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTKSLSLSPGK 232  
Db 279 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTKSLSLSPGK 330

## RESULT 27

US-10-479-326-1  
; Sequence 1, Application US/10479326  
; Publication No. US20040198961A1  
; GENERAL INFORMATION:  
; APPLICANT: Tanox, INC.  
; APPLICANT: AN, Ling-Ling  
; APPLICANT: WU, Herren  
; APPLICANT: FUNG, Michael  
; TITLE OF INVENTION: Fce FUSION PROTEINS FOR TREATMENT OF ALLERGY AND ASTHMA  
; FILE REFERENCE: TNX01-02PCT  
; CURRENT APPLICATION NUMBER: US/10/479,326  
; CURRENT FILING DATE: 2003-12-02  
; PRIOR APPLICATION NUMBER: US60/298,710  
; PRIOR FILING DATE: 2001-06-15  
; NUMBER OF SEQ ID NOS: 2  
; SOFTWARE: Patent in version 3.2  
; SEQ ID NO 1  
; LENGTH: 330  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: PEPTIDE  
; LOCATION: (1)..(330)  
US-10-479-326-1

Query Match 100.0%; Score 1263; DB 16; Length 330;  
Best Local Similarity 100.0%; Pred. No. 1.6e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 99 EPKSCDKTHTCCPCPAPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy	61	NWYVDGVEVHNAKTPREEQYNSTVRVSVLTVLHODWLNKGEYCKYSNKALPAPIEKT	120
Db	159	NWYVDGVEVHNAKTPREEQYNSTVRVSVLTVLHODWLNKGEYCKYSNKALPAPIEKT	218
Qy	121	ISKAGOPREPOVYTLPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTP	180
Db	219	ISKAGOPREPOVYTLPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTP	278
Qy	181	PVLSDSDGSFFLYSKLTVDKSRWQQGNVPSCSVMHEALNNHYTKQSLSLSPGK	232
Db	279	PVLSDSDGSFFLYSKLTVDKSRWQQGNVPSCSVMHEALNNHYTKQSLSLSPGK	330

```

RESULT 28
US-10-684-957-2
; Sequence 2, Application US/10684957
; Publication No. US2005004353A1
; GENERAL INFORMATION:
; APPLICANT: Amgen, Inc.
; APPLICANT: Welcher, Andrew
; APPLICANT: Chute, Hilary
; APPLICANT: Li, Luke
; APPLICANT: Huang, Haichun
; TITLE OF INVENTION: Human anti-IFN-gamma Neutralizing Antibodies as Selective IFN-gamma
; FILE REFERENCE: 01-1635-B
; CURRENT APPLICATION NUMBER: US/10/684,957
; CURRENT FILING DATE: 2003-10-14
; PRIOR APPLICATION NUMBER: US 60/419,057
; PRIOR FILING DATE: 2002-10-16
; PRIOR APPLICATION NUMBER: US 60/479,241
; PRIOR FILING DATE: 2003-06-17
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-684-957-2

```

	Query Match	100.0%	Score 1263;	DB 16;	Length 330;
	Best Local Similarity	100.0%;	Pred. No. 1.6e-92;		
	Matches 232;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRPEVTCVVVDVSHEDPEVKF	60		
Db	99	EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRPEVTCVVVDVSHEDPEVKF	158		
Qy	61	NWYVDGVEVFNNAKTKPREEQVNSTYRVSVLTVLHQDLNGLKEYCKVKSNKALPAPIEKT	120		
Db	159	NWYVDGVEVFNNAKTKPREEQVNSTYRVSVLTVLHQDLNGLKEYCKVKSNKALPAPIEKT	218		
Qy	121	ISAKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP	180		
Db	219	ISAKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP	278		
Qy	181	PVLDSGSGFFLYSKLTVDKSRWQCGNVFSCVMHEALHNNHYTKSLSLSPGK	232		
Db	279	PVLDSGSGFFLYSKLTVDKSRWQCGNVFSCVMHEALHNNHYTKSLSLSPGK	330		

RESULT 29  
US-10-886-838-6  
; Sequence 6, Application US/10886838  
; Publication No. US2005008642A1  
; GENERAL INFORMATION:  
; APPLICANT: Hoffmann-La Roche Inc.  
; TITLE OF INVENTION: Antibodies against insulin-like growth factor I receptor and uses  
; TITLE OF INVENTION: thereof  
; FILE REFERENCE: 21695  
; CURRENT APPLICATION NUMBER: US/10/886,838  
; CURRENT FILING DATE: 2004-07-08

```

; PRIOR APPLICATION NUMBER: EP 03015526
; PRIOR FILING DATE: 2003-07-10
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 6
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-886-838-6

```

	Query Match	100.0%;	Score 1263;	DB 17;	Length 330;
	Best Local Similarity	100.0%;	Pred. No. 1.6e-92;		
	Matches 232;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMI	SRTPEVTCVVDVSHEDPEVKF	60	
Db	99	EPKSCDKHTCCPCPAPELLGGPSVFLFPPKPKDTLMI	SRTPEVTCVVDVSHEDPEVKF	158	
Qy	61	NWTVDGVGVNATKPRREQYNSTYRVSVLTVLHQD	WLNGEKYCKVSNKALPAPIETK	120	
Db	159	NWTVDGVGVNATKPRREQYNSTYRVSVLTVLHQD	WLNGEKYCKVSNKALPAPIETK	218	
Qy	121	ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVK	GFPSDIAVEWESNGQPENNYKTP	180	
Db	219	ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVK	GFPSDIAVEWESNGQPENNYKTP	278	
Qy	181	PVLDSGGSFLLYKGLTVDKSRWQQGNVFCSVNM	HEALHNHYTKQSLSPGK	232	
Db	279	PVLDSGGSFLLYKGLTVDKSRWQQGNVFCSVNM	HEALHNHYTKQSLSPGK	330	

```

RESULT 30
US-10-822-300-3
; Sequence 3, Application US/10822300
; Publication No. US20050014934A1
; GENERAL INFORMATION:
; APPLICANT: Hinton, et al.
; TITLE OF INVENTION: ALTERATION OF FcRn BINDING AFFINITIES OR SERUM HALF-LIVES OF
; TITLE OF INVENTION: ANTIBODIES BY MUTAGENESIS
; FILE REFERENCE: 05882.0039.CFUS01
; CURRENT APPLICATION NUMBER: US/10/822.300
; CURRENT FILING DATE: 2004-04-09
; NUMBER OF SEQ ID NOS: 146
; SOFTWARE: PatentIn version 3.2.
; SEQ ID NO 3
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-822-300-3

```

	Query Match	100.0%;	Score 1263;	DB 17;	Length 330;
	Best Local Similarity	100.0%;	Pred. No. 1.6e-92;		
	Matches 232;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	1	EPKSCDKTHTCPCPAPELLGGPSVLPFPKPKDTLMISRTPEVTCVVDVSHEDP	60		
Db	99	EPKSCDKTHTCPCPAPELLGGPSVLPFPKPKDTLMISRTPEVTCVVDVSHEDP	158		
QY	61	NWYVDGVEVHNATKPRREQSYNSTYRVSVLTVLHQDWLNGKEYCKVKVSNKALP	120		
Db	159	NWYVDGVEVHNATKPRREQSYNSTYRVSVLTVLHQDWLNGKEYCKVKVSNKALP	218		
QY	121	ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNQGPENNYK	180		
Db	219	ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNQGPENNYK	278		
QY	181	PVLDSGGSFFLYSKLTVDKSRNQQGNVFCGVHMEALHNHYTQKSLSLSPGK	232		
Db	279	PVLDSGGSFFLYSKLTVDKSRNQQGNVFCGVHMEALHNHYTQKSLSLSPGK	330		

RESULT 31  
US-10-822-300-7

; Sequence 7, Application US/10822300  
; Publication No. US20050014934A1  
; GENERAL INFORMATION:  
; APPLICANT: Hinton, et al.  
; TITLE OF INVENTION: ALTERATION OF FcRn BINDING AFFINITIES OR SERUM HALF-LIVES OF  
; FILE REFERENCE: 05882.0039.CPUS01  
; CURRENT APPLICATION NUMBER: US/10/822,300  
; CURRENT FILING DATE: 2004-04-09  
; NUMBER OF SEQ ID NOS: 146  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 7  
; LENGTH: 330  
; TYPE: PRT  
; ORGANISM: artificial  
; FEATURE:  
; OTHER INFORMATION: Humanized antibody  
US-10-822-300-7

Query Match 100.0%; Score 1263; DB 17; Length 330;  
Best Local Similarity 100.0%; Pred. No. 1.6e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 99 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 159 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218  
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 219 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 278  
QY 181 PVLDSGSEFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
DB 279 PVLDSGSEFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 330

RESULT 32  
US-09-761-413-2  
; Sequence 2, Application US/09761413  
; Publication No. US20010046490A1  
; GENERAL INFORMATION:  
; APPLICANT: Tao, Weng  
; APPLICANT: Wong, Shou  
; APPLICANT: Hickey, William F  
; APPLICANT: Hamming, Joseph P.  
; APPLICANT: Baetge, E. Edward  
; TITLE OF INVENTION: CELL SURFACE-INDUCED MACROPHAGE ACTIVATION  
; FILE REFERENCE: 17810-043  
; CURRENT APPLICATION NUMBER: US/09/761,413  
; CURRENT FILING DATE: 2001-01-16  
; PRIOR APPLICATION NUMBER: US/09/178,869  
; PRIOR FILING DATE: 1998-10-26  
; NUMBER OF SEQ ID NOS: 14  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 2  
; LENGTH: 331  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-761-413-2

Query Match 100.0%; Score 1263; DB 9; Length 331;  
Best Local Similarity 100.0%; Pred. No. 1.6e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 100 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 159  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

DB 160 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 219  
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 220 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 279  
QY 181 PVLDSGSEFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
DB 280 PVLDSGSEFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 331

RESULT 33  
US-10-341-836-2  
; Sequence 2, Application US/10341836  
; Publication No. US20030120059A1  
; GENERAL INFORMATION:  
; APPLICANT: Tao, Weng  
; APPLICANT: Wong, Shou  
; APPLICANT: Hickey, William F  
; APPLICANT: Hamming, Joseph P.  
; APPLICANT: Baetge, Edward E  
; TITLE OF INVENTION: Cell Surface Molecule-Induced Macrophage Activation  
; FILE REFERENCE: 19141-543 DIVICOM2  
; CURRENT APPLICATION NUMBER: US/10/341,836  
; CURRENT FILING DATE: 2003-02-21  
; PRIOR APPLICATION NUMBER: 09/761,413  
; PRIOR FILING DATE: 2001-01-16  
; PRIOR APPLICATION NUMBER: 09/562,544  
; PRIOR FILING DATE: 2000-05-02  
; PRIOR APPLICATION NUMBER: 09/178,869  
; PRIOR FILING DATE: 1998-10-26  
; NUMBER OF SEQ ID NOS: 14  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 2  
; LENGTH: 331  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-341-836-2

Query Match 100.0%; Score 1263; DB 14; Length 331;  
Best Local Similarity 100.0%; Pred. No. 1.6e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 100 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 159  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 160 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 219  
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 220 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 279  
QY 181 PVLDSGSEFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
DB 280 PVLDSGSEFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 331

RESULT 34  
US-09-990-586-98  
; Sequence 98, Application US/09990586  
; Publication No. US20030109680A1  
; GENERAL INFORMATION:  
; APPLICANT: JIAO, JIN-AN  
; APPLICANT: WONG, HING C.  
; TITLE OF INVENTION: ANTIBODIES FOR INHIBITING BLOOD COAGULATION AND METHODS  
; FILE REFERENCE: 71758/46943-CIP2  
; CURRENT APPLICATION NUMBER: US/09/990,586  
; CURRENT FILING DATE: 2001-11-21

; PRIOR APPLICATION NUMBER: 09/293,854  
; PRIOR FILING DATE: 1999-04-16  
; NUMBER OF SEQ ID NOS: 102  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 98  
; LENGTH: 332  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-990-586-98

Query Match 100.0%; Score 1263; DB 10; Length 332;  
Best Local Similarity 100.0%; Pred. No. 1.6e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 101 EPKSCDKTHCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 160  
Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEWESNGQPENNYKTP 120  
Db 161 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEWESNGQPENNYKTP 220  
Qy 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFSPYSDIAVEWESNGQPENNYKTP 180  
Db 221 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFSPYSDIAVEWESNGQPENNYKTP 280  
Qy 181 PVLDSGSEFLYSKLTVDKSRWQQGNVFCFVSMHEALHNHYTQKSLSLSPGK 232  
Db 281 PVLDSGSEFLYSKLTVDKSRWQQGNVFCFVSMHEALHNHYTQKSLSLSPGK 332

## RESULT 35

US-10-310-113-167  
; Sequence 167, Application US/10310113  
; Publication No. US20030176664A1  
; GENERAL INFORMATION:  
; APPLICANT: JIAO, JIN-AN  
; APPLICANT: WONG, HING C.  
; APPLICANT: NIEVES, ESPERANZA LILIANA  
; APPLICANT: MOSQUERA, LUIS A.  
; TITLE OF INVENTION: USE OF ANTI-TISSUE FACTOR ANTIBODIES FOR TREATING  
; TITLE OF INVENTION: THROMBOSES  
; FILE REFERENCE: 58122(71758)  
; CURRENT APPLICATION NUMBER: US/10/310,113  
; CURRENT FILING DATE: 2002-12-04  
; PRIOR APPLICATION NUMBER: 09/990,586  
; PRIOR FILING DATE: 2001-11-21  
; PRIOR APPLICATION NUMBER: 60/343,306  
; PRIOR FILING DATE: 2001-10-29  
; PRIOR APPLICATION NUMBER: 09/293,854  
; PRIOR FILING DATE: 1999-04-16  
; PRIOR APPLICATION NUMBER: 08/814,806  
; PRIOR FILING DATE: 1997-03-10  
; NUMBER OF SEQ ID NOS: 169  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 167  
; LENGTH: 332  
; TYPE: PRT  
; ORGANISM: Homo sapiens

US-10-310-113-167  
Query Match 100.0%; Score 1263; DB 14; Length 332;  
Best Local Similarity 100.0%; Pred. No. 1.6e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 101 EPKSCDKTHCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 160  
Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEWESNGQPENNYKTP 120  
Db 161 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEWESNGQPENNYKTP 220

Qy 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFSPYSDIAVEWESNGQPENNYKTP 180  
Db 221 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFSPYSDIAVEWESNGQPENNYKTP 280  
Qy 181 PVLDSGSEFLYSKLTVDKSRWQQGNVFCFVSMHEALHNHYTQKSLSLSPGK 232  
Db 281 PVLDSGSEFLYSKLTVDKSRWQQGNVFCFVSMHEALHNHYTQKSLSLSPGK 332

## RESULT 36

US-10-230-880-98  
; Sequence 98, Application US/10230880  
; Publication No. US20030190705A1  
; GENERAL INFORMATION:  
; APPLICANT: WONG, HING C.  
; APPLICANT: STINSON, JEFFREY L.  
; APPLICANT: MOSQUERA, LUIS A.  
; TITLE OF INVENTION: METHOD OF HUMANIZING IMMUNE SYSTEM MOLECULES  
; FILE REFERENCE: 71758/58066  
; CURRENT APPLICATION NUMBER: US/10/230,880  
; CURRENT FILING DATE: 2002-12-23  
; PRIOR APPLICATION NUMBER: 09/990,586  
; PRIOR FILING DATE: 2001-11-21  
; PRIOR APPLICATION NUMBER: 60/343,306  
; PRIOR FILING DATE: 2001-10-29  
; PRIOR APPLICATION NUMBER: 09/293,854  
; PRIOR FILING DATE: 1999-04-16  
; NUMBER OF SEQ ID NOS: 174  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 98  
; LENGTH: 332  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-230-880-98

Query Match 100.0%; Score 1263; DB 14; Length 332;  
Best Local Similarity 100.0%; Pred. No. 1.6e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 101 EPKSCDKTHCTPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 160  
Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEWESNGQPENNYKTP 120  
Db 161 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEWESNGQPENNYKTP 220  
Qy 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFSPYSDIAVEWESNGQPENNYKTP 180  
Db 221 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYFSPYSDIAVEWESNGQPENNYKTP 280  
Qy 181 PVLDSGSEFLYSKLTVDKSRWQQGNVFCFVSMHEALHNHYTQKSLSLSPGK 232  
Db 281 PVLDSGSEFLYSKLTVDKSRWQQGNVFCFVSMHEALHNHYTQKSLSLSPGK 332

## RESULT 37

US-10-272-899A-8  
; Sequence 8, Application US/10272899A  
; Publication No. US20040033561A1  
; GENERAL INFORMATION:  
; APPLICANT: O'Keefe, Theresa L.  
; APPLICANT: Healy, Judith Jacques  
; APPLICANT: Newman, Walter  
; APPLICANT: Ponath, Paul  
; APPLICANT: Bruce Key  
; TITLE OF INVENTION: IMMUNOGLOBULIN DNA CASSETTE MOLECULES,  
; TITLE OF INVENTION: MONOBODY CONSTRUCTS, METHODS OF PRODUCTION, AND METHODS OF  
; TITLE OF INVENTION: USE THEREFOR  
; FILE REFERENCE: MPI01-244P2RM  
; CURRENT APPLICATION NUMBER: US/10/272,899A  
; CURRENT FILING DATE: 2002-10-17  
; PRIOR APPLICATION NUMBER: 60/350,166

;; PRIOR FILING DATE: 2001-10-19  
;; PRIOR APPLICATION NUMBER: 60/392,364  
;; PRIOR FILING DATE: 2002-06-26  
;; NUMBER OF SEQ ID NOS: 110  
;; SOFTWARE: FastSeq for Windows Version 4.0  
;; SEQ ID NO 8  
;; LENGTH: 333  
;; TYPE: PRT  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: human IgG1-WT protein  
US-10-272-899A-8  
  
Query Match 100.0%; Score 1263; DB 15; Length 333;  
Best Local Similarity 100.0%; Pred. No. 1.6e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 102 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 161  
  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 162 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 221  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 222 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 281  
  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232  
DB 282 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 333

RESULT 38  
US-10-272-899A-72  
;; Sequence 72, Application US/10272899A  
;; Publication No. US20040033561A1  
;; GENERAL INFORMATION:  
;; APPLICANT: O'Keefe, Theresa L.  
;; APPLICANT: Healy, Judith Jacques  
;; APPLICANT: Newman, Walter  
;; APPLICANT: Ponath, Paul  
;; APPLICANT: Bruce Keat  
;; TITLE OF INVENTION: IMMUNOGLOBULIN DNA CASSETTE MOLECULES,  
;; TITLE OF INVENTION: MONOBODY CONSTRUCTS, METHODS OF PRODUCTION, AND METHODS OF  
;; TITLE OF INVENTION: USE THEREFOR  
;; FILE REFERENCE: MPI01-244P2RM  
;; CURRENT APPLICATION NUMBER: US/10/272,899A  
;; CURRENT FILING DATE: 2002-10-17  
;; PRIOR APPLICATION NUMBER: 60/350,166  
;; PRIOR FILING DATE: 2001-10-19  
;; PRIOR APPLICATION NUMBER: 60/392,364  
;; PRIOR FILING DATE: 2002-06-26  
;; NUMBER OF SEQ ID NOS: 110  
;; SOFTWARE: FastSeq for Windows Version 4.0  
;; SEQ ID NO 72  
;; LENGTH: 356  
;; TYPE: PRT  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: immunoglobulin cassette protein sequence  
;; OTHER INFORMATION: Leader-huWT\_55  
US-10-272-899A-72  
  
Query Match 100.0%; Score 1263; DB 15; Length 356;  
Best Local Similarity 100.0%; Pred. No. 1.7e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 125 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 184

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 185 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 244  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 245 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 304  
  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232  
DB 305 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 356  
  
RESULT 39  
US-10-233-150-5  
;; Sequence 5, Application US/10233150  
;; Publication No. US20030108965A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Schummer, Michel  
;; APPLICANT: Hellstrom, Ingegerd  
;; APPLICANT: Hellstrom, Karl Erik  
;; APPLICANT: Ledbetter, Jeffrey A.  
;; APPLICANT: Hayden-Ledbetter, Martha  
;; TITLE OF INVENTION: DIAGNOSIS OF CARCINOMAS  
;; FILE REFERENCE: 730033.412  
;; CURRENT APPLICATION NUMBER: US/10/233,150  
;; CURRENT FILING DATE: 2002-09-09  
;; NUMBER OF SEQ ID NOS: 20  
;; SOFTWARE: FastSeq for Windows Version 4.0  
;; SEQ ID NO 5  
;; LENGTH: 358  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
US-10-233-150-5  
  
Query Match 100.0%; Score 1263; DB 14; Length 358;  
Best Local Similarity 100.0%; Pred. No. 1.7e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 127 EPKSCDKTHCTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 186  
  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 187 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 246  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 247 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 306  
  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232  
DB 307 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 358

RESULT 40  
US-09-949-713-11  
;; Sequence 11, Application US/09949713  
;; Patent No. US20020044944A1  
;; GENERAL INFORMATION:  
;; APPLICANT: NAKAMURA, No. US20020044944A1  
;; APPLICANT: NAKAMURA, Shigekazu  
;; TITLE OF INVENTION: NOVEL Fas ANTIGEN DERIVATIVE  
;; FILE REFERENCE: 1110-207P  
;; CURRENT APPLICATION NUMBER: US/09/949,713  
;; CURRENT FILING DATE: 2001-09-12  
;; PRIOR APPLICATION NUMBER: US/09/180,100  
;; PRIOR FILING DATE: 1998-11-02  
;; PRIOR APPLICATION NUMBER: PCT/JP97/01502  
;; PRIOR FILING DATE: 1997-05-01  
;; NUMBER OF SEQ ID NOS: 25  
;; SOFTWARE: PatentIn Ver. 2.0

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; SEQ ID NO 11
; LENGTH: 360
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-949-713-11

Query Match      100.0%; Score 1263; DB 9; Length 360;
Best Local Similarity 100.0%; Pred. No. 1.7e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 129 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 188

QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 189 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 248

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 249 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 308

QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
DB 309 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 360

RESULT 41
US-10-452-646-9
; Sequence 9, Application US/10452646
; Publication No. US20040018593A1
; GENERAL INFORMATION:
; APPLICANT: Carton, Jill M.
; APPLICANT: Staquet, Kimberly C.
; APPLICANT: Scallon, Bernard J.
; APPLICANT: Jill, Giles-Komar
; TITLE OF INVENTION: ANTI-RELAP FUSION ANTIBODIES, COMPOSITIONS, METHODS AND USES
; FILE REFERENCE: CEN0296 NP
; CURRENT FILING DATE: 2003-06-02
; PRIOR FILING DATE: 2003-06-02
; PRIOR FILING DATE: 2002-06-03
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: Patent in version 3.2
; SEQ ID NO 9
; LENGTH: 367
; TYPE: PRT
; ORGANISM: homo sapiens
US-10-452-646-9

Query Match      100.0%; Score 1263; DB 15; Length 367;
Best Local Similarity 100.0%; Pred. No. 1.8e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 136 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 195

QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 196 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 255

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 256 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 315

QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
DB 316 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 367

RESULT 42
US-10-157-408-7
```

```
; Sequence 7, Application US/10157408
; Publication No. US20030104535A1
; GENERAL INFORMATION:
; APPLICANT: Capon, Daniel J.
; APPLICANT: Gregory, Timothy J.
; TITLE OF INVENTION: Adhesion Variants
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/157,408
; FILING DATE: 28-May-2002
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/457,918
; FILING DATE: 1-JUN-1995
; APPLICATION NUMBER: 08/236311
; FILING DATE: 02-MAY-1994
; APPLICATION NUMBER: 07/936190
; FILING DATE: 26-AUG-1992
; APPLICATION NUMBER: 07/842777
; FILING DATE: 18-FEB-1992
; APPLICATION NUMBER: 07/250785
; FILING DATE: 28-SEP-1988
; APPLICATION NUMBER: 07/104329
; FILING DATE: 02-OCT-1987
; ATTORNEY/AGENT INFORMATION:
; NAME: Kubinec, Jeffrey S.
; REGISTRATION NUMBER: 36,575
; REFERENCE/DOCKET NUMBER: P0444PIC3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415/225-8228
; TELEFAX: 415/952-9881
; TELEX: 910/371-7168
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 371 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-10-157-408-7

Query Match      100.0%; Score 1263; DB 14; Length 371;
Best Local Similarity 100.0%; Pred. No. 1.8e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 140 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 199

QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 200 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 259

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 319

QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
DB 320 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 371
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```
RESULT 43
US-10-097-044A-7
; Sequence 7, Application US/10097044A
; Publication No. US20030143220A1
; GENERAL INFORMATION:
; APPLICANT: Capon, Daniel J.
; Gregory, Timothy J.
; TITLE OF INVENTION: Adheson Variants
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/097,044A
; FILING DATE: 28-May-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/457,918
; FILING DATE: 1-JUN-1995
; APPLICATION NUMBER: 08/236311
; FILING DATE: 02-MAY-1994
; APPLICATION NUMBER: 07/936190
; FILING DATE: 26-AUG-1992
; APPLICATION NUMBER: 07/842777
; FILING DATE: 18-FEB-1992
; APPLICATION NUMBER: 07/250785
; FILING DATE: 28-SEP-1988
; FILING DATE: 02-OCT-1987
; ATTORNEY/AGENT INFORMATION:
; NAME: Kubinec, Jeffrey S.
; REGISTRATION NUMBER: 36,575
; REFERENCE/DOCKET NUMBER: P0444P1C3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415/225-8228
; TELEFAX: 415/952-9881
; TELEX: 910/371-7168
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 371 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-10-097-044A-7

Query Match 100.0%; Score 1263; DB 14; Length 371;
Best Local Similarity 100.0%; Pred. No. 1.8e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 140 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 199
QY 61 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 120
Db 200 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 259
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
Db 260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 319
QY 181 PVLDSDGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTQKSLSLSPGK 232
Db 320 PVLDSDGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTQKSLSLSPGK 371
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RESULT 44
US-10-769-247-7
; Sequence 7, Application US/10769247
; Publication No. US20040197809A1
; GENERAL INFORMATION:
; APPLICANT: Capon, Daniel J.
; Gregory, Timothy J.
; TITLE OF INVENTION: Adheson Variants
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/769,247
; FILING DATE: 30-Jan-2004
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/457,918
; FILING DATE: 1-JUN-1995
; APPLICATION NUMBER: 08/236311
; FILING DATE: 02-MAY-1994
; APPLICATION NUMBER: 07/936190
; FILING DATE: 26-AUG-1992
; APPLICATION NUMBER: 07/842777
; FILING DATE: 18-FEB-1992
; APPLICATION NUMBER: 07/250785
; FILING DATE: 28-SEP-1988
; FILING DATE: 02-OCT-1987
; ATTORNEY/AGENT INFORMATION:
; NAME: Kubinec, Jeffrey S.
; REGISTRATION NUMBER: 36,575
; REFERENCE/DOCKET NUMBER: P0444P1C3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415/225-8228
; TELEFAX: 415/952-9881
; TELEX: 910/371-7168
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 371 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-10-769-247-7

Query Match 100.0%; Score 1263; DB 16; Length 371;
Best Local Similarity 100.0%; Pred. No. 1.8e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 140 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 199
QY 61 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 120
Db 200 NWYDGVGVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETK 259
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
Db 260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 319
QY 181 PVLDSDGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTQKSLSLSPGK 232
```



STREET: 1840 DeHavilland Drive  
CITY: Thousand Oaks  
STATE: CA  
COUNTRY: USA  
ZIP: 91320-1789  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/679,999  
FILING DATE: 09-May-2000  
FILING DATE: 06-Oct-2003  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/09/568,528  
FILING DATE: 09-May-2000  
APPLICATION NUMBER: 09/267,517  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Knight, Matthew W.  
REGISTRATION NUMBER: 36,846  
REFERENCE/DOCKET NUMBER: A-416  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 379 amino acids  
TYPE: amino acid  
STRANDEDNESS: unknown  
TOPOLOGY: unknown  
MOLECULE TYPE: protein  
FEATURE:  
NAME/KEY: Protein  
LOCATION: 1  
OTHER INFORMATION: /note= "Met (ATG) starts at -1"  
SEQUENCE DESCRIPTION: SEQ ID NO: 9:  
US-10-679-999-9  
Query Match 100.0%; Score 1263; DB 15; Length 379;  
Best Local Similarity 100.0%; Pred. No. 1.8e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 2 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVVDVSHEDPEVKF 61  
QY 61 NMVVDGVEVHNAKTPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 62 NMVVDGVEVHNAKTPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 121  
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 122 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 181  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
Db 182 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 233  
RESULT 49  
US-10-362-591-4  
Sequence 4, Application US/10362591  
Publication No. US20040072749A1  
GENERAL INFORMATION:  
APPLICANT: ZOCHER, MARCEL  
APPLICANT: BAUERLE, PATRICK  
APPLICANT: DREIER, TORSTEN  
TITLE OF INVENTION: COMPOSITION FOR THE ELIMINATION OF AUTOREACTIVE B-CELLS  
FILE REFERENCE: 029976-0110  
CURRENT APPLICATION NUMBER: US/10/362,591  
CURRENT FILING DATE: 2003-07-21  
PRIOR APPLICATION NUMBER: PCT/EP01/09714  
PRIOR FILING DATE: 2001-08-22  
PRIOR APPLICATION NUMBER: EP 00117354.1

PRIOR FILING DATE: 2000-08-22  
NUMBER OF SEQ ID NOS: 9  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 4  
LENGTH: 388  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-362-591-4  
Query Match 100.0%; Score 1263; DB 15; Length 388;  
Best Local Similarity 100.0%; Pred. No. 1.9e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 157 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVVDVSHEDPEVKF 216  
QY 61 NMVVDGVEVHNAKTPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 217 NMVVDGVEVHNAKTPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 276  
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 277 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 336  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
Db 337 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 388  
RESULT 50  
US-10-193-616-14  
Sequence 14, Application US/10193616  
Publication No. US20030096355A1  
GENERAL INFORMATION:  
APPLICANT: Zhang, Ke  
TITLE OF INVENTION: Isolation, Identification, and Characterization of  
TITLE OF INVENTION: ymkz5, a novel  
TITLE OF INVENTION: member of the TNF-Receptor Supergene Family  
FILE REFERENCE: 01017/35551A  
CURRENT APPLICATION NUMBER: US/10/193,616  
CURRENT FILING DATE: 2002-07-11  
PRIOR APPLICATION NUMBER: US/09/611,989  
PRIOR FILING DATE: 2000-07-07  
PRIOR APPLICATION NUMBER: US 60/143,137  
PRIOR FILING DATE: 1999-07-07  
NUMBER OF SEQ ID NOS: 15  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 14  
LENGTH: 396  
TYPE: PRT  
ORGANISM: Mus musculus  
FEATURE:  
OTHER INFORMATION: ymkz5-Fc fusion protein  
US-10-193-616-14  
Query Match 100.0%; Score 1263; DB 14; Length 396;  
Best Local Similarity 100.0%; Pred. No. 1.9e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 165 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVVDVSHEDPEVKF 224  
QY 61 NMVVDGVEVHNAKTPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 225 NMVVDGVEVHNAKTPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 284  
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 285 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 344  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232

Db 345 PVLSDSGSFLLYSKLTVDKSRWQGNVFCVSNVHEALHNNHYTKSLSLSPGK 396  
|||||

RESULT 51  
US-09-948-018-16  
; Sequence 16, Application US/09948018  
; Patent No. US20020150977A1  
; GENERAL INFORMATION:  
; APPLICANT: Theill et al  
; TITLE OF INVENTION: TNF RECEPTOR-LIKE MOLECULES AND USES THEREOF  
; FILE REFERENCE: 01017/37677  
; CURRENT APPLICATION NUMBER: US/09/948,018  
; CURRENT FILING DATE: 2001-09-05  
; PRIOR APPLICATION NUMBER: US 60/230,191  
; PRIOR FILING DATE: 2000-09-05  
; NUMBER OF SEQ ID NOS: 45  
; SOFTWARE: Patent in version 3.1  
; SEQ ID NO 16  
; LENGTH: 404  
; TYPE: PRT  
; ORGANISM: Mus musculus  
US-09-948-018-16

Query Match 100.0%; Score 1263; DB 9; Length 404;  
Best Local Similarity 100.0%; Pred. No. 2e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVDVSHEDPEVKF 60  
|||  
Db 162 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVDVSHEDPEVKF 221  
|||  
Qy 61 NTYVDGVEVHNATKPREQYNSYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120  
|||  
Db 222 NTYVDGVEVHNATKPREQYNSYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 281  
|||  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSNQGPNNYKTTTP 180  
|||  
Db 282 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSNQGPNNYKTTTP 341  
|||  
Qy 181 PVLSDSGSFLLYSKLTVDKSRWQGNVFCVSNVHEALHNNHYTKSLSLSPGK 232  
|||  
Db 342 PVLSDSGSFLLYSKLTVDKSRWQGNVFCVSNVHEALHNNHYTKSLSLSPGK 393  
|||

RESULT 52  
US-10-363-427-14  
; Sequence 14, Application US/10363427  
; Publication No. US20030195338A1  
; GENERAL INFORMATION:  
; APPLICANT: MedexGen Inc.  
; APPLICANT: CHUNG, Yong Hoon  
; APPLICANT: HAN, Ji Woong  
; APPLICANT: LEE, Hye Ja  
; APPLICANT: CHOI, Eun Yong  
; APPLICANT: KIM, Jin Mi  
; APPLICANT: YIM, Soo Bin  
; TITLE OF INVENTION: Concatameric Immunoadhesion  
; FILE REFERENCE:  
; CURRENT APPLICATION NUMBER: US/10/363,427  
; CURRENT FILING DATE: 2003-02-28  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: KopatentIn 1.71  
; SEQ ID NO 14  
; LENGTH: 437  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-363-427-14

Query Match 100.0%; Score 1263; DB 14; Length 437;  
Best Local Similarity 100.0%; Pred. No. 2.2e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVDVSHEDPEVKF 60  
|||  
Db 206 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVDVSHEDPEVKF 265  
|||  
Qy 61 NTYVDGVEVHNATKPREQYNSYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120  
|||  
Db 266 NTYVDGVEVHNATKPREQYNSYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 325  
|||  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSNQGPNNYKTTTP 180  
|||  
Db 326 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSNQGPNNYKTTTP 385  
|||  
Qy 181 PVLSDSGSFLLYSKLTVDKSRWQGNVFCVSNVHEALHNNHYTKSLSLSPGK 232  
|||  
Db 386 PVLSDSGSFLLYSKLTVDKSRWQGNVFCVSNVHEALHNNHYTKSLSLSPGK 437  
|||

RESULT 53  
US-10-226-435A-12  
; Sequence 12, Application US/10226435A  
; Publication No. US20040043418A1  
; GENERAL INFORMATION:  
; APPLICANT: ELI LILLY AND COMPANY AND WASHINGTON UNIVERSITY  
; TITLE OF INVENTION: Humanized Antibodies that Sequester Amyloid Beta Peptide  
; FILE REFERENCE: 8792/293  
; CURRENT APPLICATION NUMBER: US/10/226,435A  
; CURRENT FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US01/06191  
; PRIOR FILING DATE: 2001-02-26  
; PRIOR APPLICATION NUMBER: 60/184,601  
; PRIOR FILING DATE: 2000-02-24  
; PRIOR APPLICATION NUMBER: 60/254,465  
; PRIOR FILING DATE: 2000-12-08  
; PRIOR APPLICATION NUMBER: 60/254,498  
; PRIOR FILING DATE: 2000-12-08  
; NUMBER OF SEQ ID NOS: 16  
; SOFTWARE: Patent in version 3.1  
; SEQ ID NO 12  
; LENGTH: 442  
; TYPE: PRT  
; ORGANISM: Artificial sequence  
; FEATURE:  
; OTHER INFORMATION: Humanized antibodies  
US-10-226-435A-12

Query Match 100.0%; Score 1263; DB 15; Length 442;  
Best Local Similarity 100.0%; Pred. No. 2.2e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVDVSHEDPEVKF 60  
|||  
Db 211 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVDVSHEDPEVKF 270  
|||  
Qy 61 NTYVDGVEVHNATKPREQYNSYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120  
|||  
Db 271 NTYVDGVEVHNATKPREQYNSYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 330  
|||  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSNQGPNNYKTTTP 180  
|||  
Db 331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVSNQGPNNYKTTTP 390  
|||  
Qy 181 PVLSDSGSFLLYSKLTVDKSRWQGNVFCVSNVHEALHNNHYTKSLSLSPGK 232  
|||  
Db 391 PVLSDSGSFLLYSKLTVDKSRWQGNVFCVSNVHEALHNNHYTKSLSLSPGK 442  
|||

RESULT 54  
US-10-487-322-12  
; Sequence 12, Application US/10487322  
; Publication No. US20040192898A1  
; GENERAL INFORMATION:  
; APPLICANT: ELI LILLY AND COMPANY  
; TITLE OF INVENTION: ANTI-AB ANTIBODIES

```
FILE REFERENCE: X-15113
CURRENT APPLICATION NUMBER: US/10/487,322
CURRENT FILING DATE: 2004-02-17
PRIOR APPLICATION NUMBER: 60/313,224
PRIOR FILING DATE: 2001-08-17
NUMBER OF SEQ ID NOS: 17
SOFTWARE: Patent in version 3.1
SEQ ID NO 12
LENGTH: 442
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Humanized antibody
NAME/KEY: MISC FEATURE
LOCATION: (1)..(442)
OTHER INFORMATION: HUMANIZED ANTIBODY HEAVY CHAIN
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (56)..(56)
OTHER INFORMATION: Xaa at position 56 is any amino acid, provided that if Xaa at pos
OTHER INFORMATION: ition 57 is neither Asp nor Pro and Xaa at position 59 is Ser or
OTHER INFORMATION: Thr, then Xaa at position 56 is not Asn
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (57)..(57)
OTHER INFORMATION: Xaa at position 57 is any amino acid, provided that if Xaa at pos
OTHER INFORMATION: ition 56 is Asn and Xaa at position 58 is Ser or Thr, then Xaa a
OTHER INFORMATION: t position 57 is Asp or Pro
FEATURE:
NAME/KEY: MISC FEATURE
LOCATION: (58)..(58)
OTHER INFORMATION: Xaa at position 58 is any amino acid, provided that if Xaa at pos
OTHER INFORMATION: ition 56 is Asn and Xaa at position 57 is neither Asp nor Pro, b
OTHER INFORMATION: hen Axx at position 58 is neither Ser nor Thr
US-10-487-322-12

Query Match 100.0%; Score 1263; DB 16; Length 442;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 211 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 270
Qy 61 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQQDLNKGKEYCKVSNKALPAPIEKT 120
Db 271 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQQDLNKGKEYCKVSNKALPAPIEKT 330
Qy 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 331 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 390
Qy 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
Db 391 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 442

RESULT 55
US-10-150-475A-6
Sequence 6, Application US/10150475A
Publication No. US20030103985A1
GENERAL INFORMATION:
APPLICANT: Adolf, G. et al.
TITLE OF INVENTION: Cytotoxic CD44 Antibody Immunoconjugates
FILE REFERENCE: 1/1211
CURRENT APPLICATION NUMBER: US/10/150,475A
CURRENT FILING DATE: 2002-05-17
PRIOR APPLICATION NUMBER: US 60/307,451
PRIOR FILING DATE: 2001-07-24
NUMBER OF SEQ ID NOS: 9
SOFTWARE: Patent in Ver. 2.1
SEQ ID NO 6
```

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LENGTH: 444
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Humanised
OTHER INFORMATION: Murine Antibody BIWA 4 Heavy Chain SEQ ID NO: 6
US-10-150-475A-6

Query Match 100.0%; Score 1263; DB 14; Length 444;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 213 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 272
Qy 61 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQQDLNKGKEYCKVSNKALPAPIEKT 120
Db 273 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQQDLNKGKEYCKVSNKALPAPIEKT 332
Qy 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 333 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 392
Qy 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
Db 393 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 444

RESULT 56
US-10-704-522-6
Sequence 6, Application US/10704522
Publication No. US20040120949A1
GENERAL INFORMATION:
APPLICANT: Adolf, Gunther
APPLICANT: Baumann, Michael
APPLICANT: Heider, Karl-Heinz
TITLE OF INVENTION: Compositions and methods for treating cancer using
TITLE OF INVENTION: cytotoxic CD44 Antibody Immunoconjugates
FILE REFERENCE: 1/1414
CURRENT APPLICATION NUMBER: US/10/704,522
CURRENT FILING DATE: 2003-11-07
PRIOR APPLICATION NUMBER: US 60/429,516
PRIOR FILING DATE: 2002-11-27
PRIOR APPLICATION NUMBER: EP 02024881
PRIOR FILING DATE: 2002-11-08
NUMBER OF SEQ ID NOS: 9
SOFTWARE: Patent in Ver. 2.1
SEQ ID NO 6
LENGTH: 444
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Humanised Murine Antibody BIWA 4 Heavy Chain
US-10-704-522-6

Query Match 100.0%; Score 1263; DB 16; Length 444;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 213 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 272
Qy 61 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQQDLNKGKEYCKVSNKALPAPIEKT 120
Db 273 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQQDLNKGKEYCKVSNKALPAPIEKT 332
Qy 121 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 333 ISKAGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 392
Qy 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
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Db 393 PVLDSGSGFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 444
|||||
RESULT 57
US-10-645-215-6
; Sequence 6, Application US/10645215
; Publication No. US20040126379A1
; GENERAL INFORMATION:
; APPLICANT: Adolf, Guenther
; APPLICANT: Baum, Anke
; APPLICANT: Heider, Karl-Heinz
; TITLE OF INVENTION: Compositions and Methods for Treating Cancer using
; Cytotoxic CD44 Antibody Immunocojugates and
; TITLE OF INVENTION: Chemotherapeutic Agents
; FILE REFERENCE: 1/1383
; CURRENT APPLICATION NUMBER: US/10/645,215
; CURRENT FILING DATE: 2003-08-21
; PRIOR APPLICATION NUMBER: EP 02 018 686.2
; PRIOR FILING DATE: August 21, 2002
; PRIOR APPLICATION NUMBER: US 60/405,956
; PRIOR FILING DATE: August 26, 2002
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO 6
; LENGTH: 444
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Humanised Murine Antibody BIWA 4 Heavy Chain
US-10-645-215-6
Query Match 100.0%; Score 1263; DB 16; Length 444;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 213 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 272
Qy 61 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 273 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 332
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180
Db 333 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 392
Qy 181 PVLDSGSGFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 232
Db 393 PVLDSGSGFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 444
|||||
RESULT 58
US-10-320-231A-79
; Sequence 79, Application US/10320231A
; Publication No. US20030194405A1
; GENERAL INFORMATION:
; APPLICANT: Neben, Steven
; APPLICANT: Takeuchi, Toshihiko
; APPLICANT: Tomkinson, Adrian
; TITLE OF INVENTION: Antibody Inhibiting Stem Cell Factor Activity And Use For
; Treatment Of Asthma
; FILE REFERENCE: 7430*163
; CURRENT APPLICATION NUMBER: US/10/320,231A
; CURRENT FILING DATE: 2002-12-19
; PRIOR APPLICATION NUMBER: US 60/342,174
; PRIOR FILING DATE: 2001-12-17
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 79
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-901-34
Query Match 100.0%; Score 1263; DB 15; Length 445;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 214 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 273
Qy 61 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 274 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180
Db 334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 393
Qy 181 PVLDSGSGFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 232
Db 394 PVLDSGSGFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 445
|||||
RESULT 60
US-10-408-901-42
; Sequence 34, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
; APPLICANT: Boyle, William
; APPLICANT: Huang, Haichun
; APPLICANT: Elliot, Robin
; APPLICANT: Sullivan, John
; APPLICANT: Medlock, Eugene
; APPLICANT: Martin, Francis
; TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathwa
; Inhibitors
; FILE REFERENCE: MEHB 01-1145-A
; CURRENT APPLICATION NUMBER: US/10/408,901
; CURRENT FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 76
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 34
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-901-34
Query Match 100.0%; Score 1263; DB 15; Length 445;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 214 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 273
Qy 61 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 274 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180
Db 334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 393
Qy 181 PVLDSGSGFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 232
Db 394 PVLDSGSGFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 445
|||||
RESULT 60
US-10-408-901-42
; Sequence 34, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
; APPLICANT: Boyle, William
; APPLICANT: Huang, Haichun
; APPLICANT: Elliot, Robin
; APPLICANT: Sullivan, John
; APPLICANT: Medlock, Eugene
; APPLICANT: Martin, Francis
; TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathwa
; Inhibitors
; FILE REFERENCE: MEHB 01-1145-A
; CURRENT APPLICATION NUMBER: US/10/408,901
; CURRENT FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 76
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 34
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-901-34
Query Match 100.0%; Score 1263; DB 15; Length 445;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 214 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 273
Qy 61 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 274 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180
Db 334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 393
Qy 181 PVLDSGSGFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 232
Db 394 PVLDSGSGFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 445
|||||
RESULT 60
US-10-408-901-42
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; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: synthetic sequence
US-10-320-231A-79
Query Match 100.0%; Score 1263; DB 14; Length 445;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 214 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 273
Qy 61 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 274 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180
Db 334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 393
Qy 181 PVLDSGSGFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 232
Db 394 PVLDSGSGFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 445
|||||
RESULT 59
US-10-408-901-34
; Sequence 34, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
; APPLICANT: Boyle, William
; APPLICANT: Huang, Haichun
; APPLICANT: Elliot, Robin
; APPLICANT: Sullivan, John
; APPLICANT: Medlock, Eugene
; APPLICANT: Martin, Francis
; TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathwa
; Inhibitors
; FILE REFERENCE: MEHB 01-1145-A
; CURRENT APPLICATION NUMBER: US/10/408,901
; CURRENT FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 76
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 34
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-901-34
Query Match 100.0%; Score 1263; DB 15; Length 445;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 214 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 273
Qy 61 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 274 NWYVDGVEVHNKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 180
Db 334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTP 393
Qy 181 PVLDSGSGFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 232
Db 394 PVLDSGSGFLYSLKLTVDKSRWQGNVFCVSMHEALHNHYTKQSLSPGK 445
|||||
RESULT 60
US-10-408-901-42
```

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; Sequence 42, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
; APPLICANT: Boyle, William
; APPLICANT: Huang, Haichun
; APPLICANT: Elliott, Robin
; APPLICANT: Sullivan, John
; APPLICANT: Medlock, Eugene
; APPLICANT: Martin, Francis
; TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathway
; FILE REFERENCE: MBHB 01-1145-A
; CURRENT FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 76
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 42
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-901-42

Query Match      100.0%; Score 1263; DB 15; Length 445;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
Db      214 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVK 273
QY      61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db      274 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333
QY      121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db      334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 393
QY      181 PVLDSGDSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232
Db      394 PVLDSGDSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 445

RESULT 61
US-10-408-901-30
; Sequence 30, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
; APPLICANT: Boyle, William
; APPLICANT: Huang, Haichun
; APPLICANT: Elliott, Robin
; APPLICANT: Sullivan, John
; APPLICANT: Medlock, Eugene
; APPLICANT: Martin, Francis
; TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathway
; FILE REFERENCE: MBHB 01-1145-A
; CURRENT FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 76
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 30
; LENGTH: 446
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-901-30

Query Match      100.0%; Score 1263; DB 15; Length 446;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
Db      215 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 274
QY      61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db      275 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334
QY      121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db      335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394
QY      181 PVLDSGDSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232
Db      395 PVLDSGDSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 446

RESULT 63
US-10-408-901-46
; Sequence 46, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
; APPLICANT: Boyle, William
; APPLICANT: Huang, Haichun
; APPLICANT: Elliott, Robin
; APPLICANT: Sullivan, John
; APPLICANT: Medlock, Eugene
; APPLICANT: Martin, Francis
; TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathway
; FILE REFERENCE: MBHB 01-1145-A
; CURRENT FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 76
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 30
; LENGTH: 446
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-901-30

Query Match      100.0%; Score 1263; DB 15; Length 446;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
Db      215 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 274
QY      61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db      275 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334
QY      121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db      335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394
QY      181 PVLDSGDSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232
Db      395 PVLDSGDSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 446
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Db      215 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 274
QY      61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db      275 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334
QY      121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db      335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394
QY      181 PVLDSGDSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232
Db      395 PVLDSGDSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 446

RESULT 62
US-10-408-901-38
; Sequence 38, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
; APPLICANT: Boyle, William
; APPLICANT: Huang, Haichun
; APPLICANT: Elliott, Robin
; APPLICANT: Sullivan, John
; APPLICANT: Medlock, Eugene
; APPLICANT: Martin, Francis
; TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathway
; FILE REFERENCE: MBHB 01-1145-A
; CURRENT FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 76
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 38
; LENGTH: 446
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-901-38

Query Match      100.0%; Score 1263; DB 15; Length 446;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
Db      215 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 274
QY      61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db      275 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334
QY      121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db      335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394
QY      181 PVLDSGDSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232
Db      395 PVLDSGDSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 446

RESULT 63
US-10-408-901-46
; Sequence 46, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
; APPLICANT: Boyle, William
; APPLICANT: Huang, Haichun
; APPLICANT: Elliott, Robin
; APPLICANT: Sullivan, John
; APPLICANT: Medlock, Eugene
; APPLICANT: Martin, Francis
; TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathway
; FILE REFERENCE: MBHB 01-1145-A
; CURRENT FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 76
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 38
; LENGTH: 446
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-901-38

Query Match      100.0%; Score 1263; DB 15; Length 446;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
Db      215 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 274
QY      61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db      275 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334
QY      121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db      335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394
QY      181 PVLDSGDSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232
Db      395 PVLDSGDSFLLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 446
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; FILE REFERENCE: MBHB 01-1145-A
; CURRENT APPLICATION NUMBER: US/10/408,901
; CURRENT FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 76
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 46
; LENGTH: 446
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-901-46

Query Match      100.0%; Score 1263; DB 15; Length 446;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 215 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy 61 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 120
Db 275 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 334

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
Db 335 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 394

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSFGK 232
Db 395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSFGK 446

RESULT 64
US-10-408-901-50
; Sequence 50, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
; APPLICANT: Boyle, William
; APPLICANT: Huang, Haichun
; APPLICANT: Elliott, Robin
; APPLICANT: Sullivan, John
; APPLICANT: Medlock, Eugene
; APPLICANT: Martin, Francis
; TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathway
; TITLE OF INVENTION: Inhibitors
; FILE REFERENCE: MBHB 01-1145-A
; CURRENT APPLICATION NUMBER: US/10/408,901
; CURRENT FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 76
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 50
; LENGTH: 446
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-901-50

Query Match      100.0%; Score 1263; DB 15; Length 446;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 215 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy 61 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 120
Db 275 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 334

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
Db 335 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 394

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSFGK 232
Db 395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSFGK 446
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; FILE REFERENCE: MBHB 01-1145-A
; CURRENT APPLICATION NUMBER: US/10/408,901
; CURRENT FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 76
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 46
; LENGTH: 446
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-901-46

Query Match      100.0%; Score 1263; DB 15; Length 446;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 215 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy 61 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 120
Db 275 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 334

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
Db 335 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 394

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSFGK 232
Db 395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSFGK 446

RESULT 65
US-10-435-299-7
; Sequence 7, Application US/10435299
; Publication No. US20040052783A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Gingrich, Roger
; APPLICANT: Link, Brian
; APPLICANT: Tseo, J. Yun
; TITLE OF INVENTION: HUMANIZED ANTIBODIES AGAINST CD3
; FILE REFERENCE: 05882-0176-CNUS04
; CURRENT APPLICATION NUMBER: US/10/435,299
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 09/618,380
; PRIOR FILING DATE: 2000-07-18
; PRIOR APPLICATION NUMBER: US 08/397,411
; PRIOR FILING DATE: 1995-03-01
; PRIOR APPLICATION NUMBER: US 07/859,583
; PRIOR FILING DATE: 1992-03-27
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 446
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Complete heavy chain of Humanized ID10 Ab
US-10-435-299-7

Query Match      100.0%; Score 1263; DB 15; Length 446;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 215 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy 61 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 120
Db 275 NWYVDGVEVHNATKPREEQNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 334

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
Db 335 ISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 394

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSFGK 232
Db 395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKLSLSFGK 446

RESULT 66
US-09-256-156-1
; Sequence 1, Application US/09256156A
; Publication No. US20030105294A1
; GENERAL INFORMATION:
; APPLICANT: GILLIES, Stephen D
; APPLICANT: LO, Kin-Ming
; APPLICANT: LAN, Yan
; APPLICANT: WESOLOWSKI, John
; TITLE OF INVENTION: Enhancing the Circulating Half-life of Antibody-based
; FILE REFERENCE: LEX-003
; CURRENT APPLICATION NUMBER: US/09/256,156A
; CURRENT FILING DATE: 1999-02-24
; EARLIER APPLICATION NUMBER: US 60/075,887
; EARLIER FILING DATE: 1998-02-25
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
```

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; LENGTH: 447
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: IGG-1 CHAIN C REGION
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (1)..(117)
; OTHER INFORMATION: The xaa at positions 1 to 117 are non-conserved
; OTHER INFORMATION: amino acids
US-09-256-156-1

Query Match 100.0%; Score 1263; DB 10; Length 447;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 216 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275
QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 395
QY 181 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVMHAEALHNHYTQKSLSLSPGK 232
DB 396 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVMHAEALHNHYTQKSLSLSPGK 447
```

```
RESULT 67
US-10-684-957-17
; Sequence 17, Application US/10684957
; Publication No. US20050004353A1
; GENERAL INFORMATION:
; APPLICANT: Amgen, Inc.
; APPLICANT: Welcher, Andrew
; APPLICANT: Chute, Hilary
; APPLICANT: Li, Luke
; APPLICANT: Huang, Haichun
; TITLE OF INVENTION: Human anti-IFN-gamma Neutralizing Antibodies as Selective IFN-gamma
; TITLE OF INVENTION: Pathway Inhibitors
; FILE REFERENCE: 01-1635-B
; CURRENT APPLICATION NUMBER: US/10/684,957
; PRIOR FILING DATE: 2003-10-14
; PRIOR APPLICATION NUMBER: US 60/419,057
; PRIOR FILING DATE: 2002-10-16
; PRIOR APPLICATION NUMBER: US 60/479,241
; PRIOR FILING DATE: 2003-06-17
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 17
; LENGTH: 447
; TYPE: PRT
; ORGANISM: homo sapiens
US-10-684-957-17

Query Match 100.0%; Score 1263; DB 16; Length 447;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 216 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275
QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
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DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 395
QY 181 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVMHAEALHNHYTQKSLSLSPGK 232
DB 396 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVMHAEALHNHYTQKSLSLSPGK 447

RESULT 68
US-10-684-957-19
; Sequence 19, Application US/10684957
; Publication No. US20050004353A1
; GENERAL INFORMATION:
; APPLICANT: Amgen, Inc.
; APPLICANT: Welcher, Andrew
; APPLICANT: Chute, Hilary
; APPLICANT: Li, Luke
; APPLICANT: Huang, Haichun
; TITLE OF INVENTION: Human anti-IFN-gamma Neutralizing Antibodies as Selective IFN-gamma
; TITLE OF INVENTION: Pathway Inhibitors
; FILE REFERENCE: 01-1635-B
; CURRENT APPLICATION NUMBER: US/10/684,957
; CURRENT FILING DATE: 2003-10-14
; PRIOR APPLICATION NUMBER: US 60/419,057
; PRIOR FILING DATE: 2002-10-16
; PRIOR APPLICATION NUMBER: US 60/479,241
; PRIOR FILING DATE: 2003-06-17
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 19
; LENGTH: 447
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-684-957-19

Query Match 100.0%; Score 1263; DB 16; Length 447;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 216 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275
QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 395
QY 181 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVMHAEALHNHYTQKSLSLSPGK 232
DB 396 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVMHAEALHNHYTQKSLSLSPGK 447
```

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US-10-684-957-17
; Sequence 17, Application US/10684957
; Publication No. US20050004353A1
; GENERAL INFORMATION:
; APPLICANT: Amgen, Inc.
; APPLICANT: Welcher, Andrew
; APPLICANT: Chute, Hilary
; APPLICANT: Li, Luke
; APPLICANT: Huang, Haichun
; TITLE OF INVENTION: Human anti-IFN-gamma Neutralizing Antibodies as Selective IFN-gamma
; TITLE OF INVENTION: Pathway Inhibitors
; FILE REFERENCE: 01-1635-B
; CURRENT APPLICATION NUMBER: US/10/684,957
; CURRENT FILING DATE: 2003-10-14
; PRIOR APPLICATION NUMBER: US 60/419,057
; PRIOR FILING DATE: 2002-10-16
; PRIOR APPLICATION NUMBER: US 60/479,241
; PRIOR FILING DATE: 2003-06-17
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 17
; LENGTH: 447
; TYPE: PRT
; ORGANISM: homo sapiens
US-10-684-957-17

Query Match 100.0%; Score 1263; DB 16; Length 447;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 216 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275
QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
```

```
US-10-684-957-21
; Sequence 21, Application US/10684957
; Publication No. US20050004353A1
; GENERAL INFORMATION:
; APPLICANT: Amgen, Inc.
; APPLICANT: Welcher, Andrew
; APPLICANT: Chute, Hilary
; APPLICANT: Li, Luke
; APPLICANT: Huang, Haichun
; TITLE OF INVENTION: Human anti-IFN-gamma Neutralizing Antibodies as Selective IFN-gamma
; TITLE OF INVENTION: Pathway Inhibitors
; FILE REFERENCE: 01-1635-B
; CURRENT APPLICATION NUMBER: US/10/684,957
; CURRENT FILING DATE: 2003-10-14
; PRIOR APPLICATION NUMBER: US 60/419,057
; PRIOR FILING DATE: 2002-10-16
; PRIOR APPLICATION NUMBER: US 60/479,241
; PRIOR FILING DATE: 2003-06-17
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 21
; LENGTH: 447
; TYPE: PRT
; ORGANISM: homo sapiens
US-10-684-957-21

Query Match 100.0%; Score 1263; DB 16; Length 447;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 216 EPKSCDKTHTCPCPAPELLGGPSVFLFPPPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275
QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 395
QY 181 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVMHAEALHNHYTQKSLSLSPGK 232
DB 396 PVLDSGSGFFLYSKLTVDKSRWQOGNVFSCSVMHAEALHNHYTQKSLSLSPGK 447
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; PRIOR APPLICATION NUMBER: US 60/479,241  
; PRIOR FILING DATE: 2003-06-17  
; NUMBER OF SEQ ID NOS: 57  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 21  
; LENGTH: 447  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-684-957-21

Query Match 100.0%; Score 1263; DB 16; Length 447;  
Best Local Similarity 100.0%; Pred. No. 2.2e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 216 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 275  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
DB 276 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 335  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 180  
DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 395  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 396 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 447

## RESULT 70

US-10-684-957-32.  
; Sequence 32, Application US/10684957  
; Publication No. US20050004353A1  
; GENERAL INFORMATION:  
; APPLICANT: Amgen, Inc.  
; APPLICANT: Welcher, Andrew  
; APPLICANT: Chute, Hilary  
; APPLICANT: Li, Luke  
; APPLICANT: Huang, Haichun  
; TITLE OF INVENTION: Human anti-IFN-gamma Neutralizing Antibodies as Selective IFN-gam  
; FILE OF INVENTION: Pathway Inhibitors  
; FILE REFERENCE: 01-1635-B  
; CURRENT APPLICATION NUMBER: US/10/684,957  
; PRIOR APPLICATION NUMBER: 2003-10-14  
; PRIOR FILING DATE: 2003-06-17  
; PRIOR FILING DATE: 2002-10-16  
; PRIOR FILING DATE: 2002-10-16  
; PRIOR FILING DATE: 2003-06-17  
; NUMBER OF SEQ ID NOS: 57  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 32  
; LENGTH: 447  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-684-957-32

Query Match 100.0%; Score 1263; DB 16; Length 447;  
Best Local Similarity 100.0%; Pred. No. 2.2e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 216 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 275  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
DB 276 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 335  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 180  
DB 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 395

QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 396 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 447

## RESULT 71

US-10-378-567-2  
; Sequence 2, Application US/10378567  
; Publication No. US20040006208A1  
; GENERAL INFORMATION:  
; APPLICANT: KARPUSAS, MICHAEL  
; APPLICANT: HSU, YEN-MING  
; APPLICANT: TAYLOR, FREDERICK R.  
; APPLICANT: ZHENG, ZHONGLI  
; TITLE OF INVENTION: CO-CRYSTAL STRUCTURE OF MONOCLONAL ANTIBODY 5C8 AND  
; FILE REFERENCE: A096CON1  
; CURRENT APPLICATION NUMBER: US/10/378,567  
; CURRENT FILING DATE: 2003-02-28  
; PRIOR APPLICATION NUMBER: PCT/US01/27352  
; PRIOR FILING DATE: 2001-08-31  
; PRIOR APPLICATION NUMBER: 60/276,452  
; PRIOR FILING DATE: 2001-03-16  
; PRIOR APPLICATION NUMBER: 60/229,933  
; PRIOR FILING DATE: 2000-09-01  
; NUMBER OF SEQ ID NOS: 3  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 2  
; LENGTH: 448  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
; OTHER INFORMATION: humanized 5c8 heavy chain amino acid  
US-10-378-567-2

Query Match 100.0%; Score 1263; DB 15; Length 448;  
Best Local Similarity 100.0%; Pred. No. 2.2e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 217 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 276  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
DB 277 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 336  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 180  
DB 337 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 396  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 397 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 448

## RESULT 72

US-10-449-566-107  
; Sequence 107, Application US/10449566  
; Publication No. US20040010124A1  
; GENERAL INFORMATION:  
; APPLICANT: JOHNSON, Leslie S.  
; APPLICANT: HUANG, Ling  
; APPLICANT: Li, Hua  
; APPLICANT: TUAILLON, Nadine  
; TITLE OF INVENTION: CD16A BINDING PROTEINS AND USE FOR THE  
; FILE REFERENCE: 529392000100  
; CURRENT APPLICATION NUMBER: US/10/449,566  
; CURRENT FILING DATE: 2003-05-29  
; PRIOR APPLICATION NUMBER: 60/384,689

```
; PRIOR FILING DATE: 2002-05-30
; PRIOR APPLICATION NUMBER: 60/439,320
; PRIOR FILING DATE: 2003-01-10
; NUMBER OF SEQ ID NOS: 119
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 107
; LENGTH: 448
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-449-566-107

Query Match      100.0%; Score 1263; DB 15; Length 448;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 217 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 276

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 277 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 336

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
DB 337 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 396

QY 181 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232
DB 397 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 448
```

```
RESULT 73
US-09-875-338-17
; Sequence 17, Application US/09875338
; Patent No. US20020095024A1
; GENERAL INFORMATION:
; APPLICANT: MIKESELL, GLEN E.
; APPLICANT: CHANG, HAN
; APPLICANT: FINGER, JOSHUA N.
; APPLICANT: YANG, GUCHEN
; APPLICANT: LU, PIN
; APPLICANT: ZHOU, XIA-DI
; APPLICANT: PEACH, ROBERT
; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
; TITLE OF INVENTION: IMMUNOMODULATION
; FILE REFERENCE: 3053-4071US2
; CURRENT APPLICATION NUMBER: US/09/875,338
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 60/272,107
; PRIOR FILING DATE: 2001-02-28
; PRIOR APPLICATION NUMBER: 60/209,811
; PRIOR FILING DATE: 2000-06-06
; NUMBER OF SEQ ID NOS: 94
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 17
; LENGTH: 451
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: fusion construct
US-09-875-338-17

Query Match      100.0%; Score 1263; DB 9; Length 451;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 220 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 279
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QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 280 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
DB 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399

QY 181 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232
DB 400 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 451

RESULT 74
US-09-822-698A-26
; Sequence 26, Application US/09822698A
; Patent No. US20020146750A1
; GENERAL INFORMATION:
; APPLICANT: Hoogenboom, Hendricus R.J.M.
; APPLICANT: Henderikx, Maria P.G.
; TITLE OF INVENTION: MUCIN-1 Specific Binding Members and Methods of Use Thereof
; FILE REFERENCE: DXX-015.1 US
; CURRENT APPLICATION NUMBER: US/09/822,698A
; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: US 09/538,913
; PRIOR FILING DATE: 2000-03-30
; NUMBER OF SEQ ID NOS: 112
; SOFTWARE: Microsoft Word
; SEQ ID NO 26
; LENGTH: 451
; TYPE: PRT
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: immunoglobulin heavy chain of MUC1-specific PH1-IgG1
US-09-822-698A-26
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```
Query Match      100.0%; Score 1263; DB 9; Length 451;
Best Local Similarity 100.0%; Pred. No. 2.2e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 220 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 279

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 280 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
DB 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399

QY 181 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 232
DB 400 PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSLSPGK 451

RESULT 75
US-10-077-023-17
; Sequence 17, Application US/10077023
; Publication NO. US20030031675A1
; GENERAL INFORMATION:
; APPLICANT: MIKESELL, GLEN E.
; APPLICANT: CHANG, HAN
; APPLICANT: FINGER, JOSHUA N.
; APPLICANT: YANG, GUCHEN
; APPLICANT: LU, PIN
; APPLICANT: ZHOU, XIA-DI
; APPLICANT: PEACH, ROBERT
; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
; TITLE OF INVENTION: IMMUNOMODULATION
; FILE REFERENCE: 3053-4071US3
```

; CURRENT APPLICATION NUMBER: US/10/077,023  
; CURRENT FILING DATE: 2002-02-15  
; PRIOR APPLICATION NUMBER: 60/272,107  
; PRIOR FILING DATE: 2001-02-28  
; PRIOR APPLICATION NUMBER: 60/209,811  
; PRIOR FILING DATE: 2000-06-06  
; NUMBER OF SEQ ID NOS: 138  
; SOFTWARE: Patent in Ver. 2.1  
; SEQ ID NO 17  
; LENGTH: 451  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
; OTHER INFORMATION: fusion construct  
US-10-077-023-17

Query Match 100.0%; Score 1263; DB 14; Length 451;  
Best Local Similarity 100.0%; Pred. No. 2.2e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 220 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 279  
QY 61 NWYVDGVEVHNKTKPREEQNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 280 NWYVDGVEVHNKTKPREEQNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
DB 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTOKSLSLSPGK 232  
DB 400 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTOKSLSLSPGK 451

RESULT 76  
US-10-849-615-69  
; Sequence 69, Application US/10849615  
; Publication No. US20050025764A1  
; GENERAL INFORMATION:  
; APPLICANT: Allan, Barrett W.  
; APPLICANT: Davies, Julian  
; APPLICANT: Marquis, David M.  
; APPLICANT: Ondek, Brian  
; APPLICANT: Watkins, Jeffery D.  
; TITLE OF INVENTION: CD20 BINDING MOLECULES  
; FILE REFERENCE: AME-09016  
; CURRENT APPLICATION NUMBER: US/10/849,615  
; CURRENT FILING DATE: 2004-05-20  
; NUMBER OF SEQ ID NOS: 102  
; SOFTWARE: Patent in version 3.3  
; SEQ ID NO 69  
; LENGTH: 451  
; TYPE: PRT  
; ORGANISM: artificial  
; FEATURE:  
; OTHER INFORMATION: Synthetic construct  
; NAME/KEY: MISC FEATURE  
; LOCATION: (1)-(451)  
; OTHER INFORMATION: AME 33 complete heavy chain  
US-10-849-615-69

Query Match 100.0%; Score 1263; DB 17; Length 451;  
Best Local Similarity 100.0%; Pred. No. 2.2e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 220 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 279

QY 61 NWYVDGVEVHNKTKPREEQNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 280 NWYVDGVEVHNKTKPREEQNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
DB 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTOKSLSLSPGK 232  
DB 400 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTOKSLSLSPGK 451

RESULT 77  
US-09-773-877A-16  
; Sequence 16, Application US/09773877A  
; Publication No. US20030017977A1  
; GENERAL INFORMATION:  
; APPLICANT: Xia, Yu-Ping et al.  
; TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES  
; FILE REFERENCE: REG 710b  
; CURRENT APPLICATION NUMBER: US/09/773,877A  
; CURRENT FILING DATE: 2001-01-31  
; NUMBER OF SEQ ID NOS: 27  
; SOFTWARE: Patent in version 3.0  
; SEQ ID NO 16  
; LENGTH: 452  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Flt1(2-3 deltaB)-Fc  
US-09-773-877A-16

Query Match 100.0%; Score 1263; DB 10; Length 452;  
Best Local Similarity 100.0%; Pred. No. 2.3e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 221 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 280  
QY 61 NWYVDGVEVHNKTKPREEQNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 281 NWYVDGVEVHNKTKPREEQNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 340  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
DB 341 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 400  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTOKSLSLSPGK 232  
DB 401 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTOKSLSLSPGK 452

RESULT 78  
US-10-813-483-6  
; Sequence 6, Application US/10813483  
; Publication No. US20040197324A1  
; GENERAL INFORMATION:  
; APPLICANT: LIU, JUN  
; APPLICANT: SHIRE, STEVEN J.  
; TITLE OF INVENTION: High Concentration Antibody and Protein Formulations  
; FILE REFERENCE: P2026R1-US  
; CURRENT APPLICATION NUMBER: US/10/813,483  
; CURRENT FILING DATE: 2004-03-29  
; PRIOR APPLICATION NUMBER: US 60/460,659  
; PRIOR FILING DATE: 2003-04-04  
; NUMBER OF SEQ ID NOS: 6  
; SEQ ID NO 6  
; LENGTH: 453  
; TYPE: PRT  
; ORGANISM: Artificial sequence

FEATURE:  
OTHER INFORMATION: Hu-901, heavy chain  
US-10-813-483-6  
Query Match 100.0%; Score 1263; DB 16; Length 453;  
Best Local Similarity 100.0%; Pred. No. 2.3e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 222 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 281  
QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 282 NWYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 341  
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 342 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 401  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
DB 402 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 453

RESULT 79  
US-09-773-877A-18  
Sequence 18, Application US/09773877A  
Publication No. US20030017977A1  
GENERAL INFORMATION:  
APPLICANT: Xia, Yu-Ping et al.  
TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES  
FILE REFERENCE: REG 710b  
CURRENT FILING DATE: 2001-01-31  
NUMBER OF SEQ ID NOS: 27  
SOFTWARE: PatentIn version 3.0  
SEQ ID NO 18  
LENGTH: 462  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Flt1(2-3)-Fc (Mut3)  
US-09-773-877A-18

Query Match 100.0%; Score 1263; DB 10; Length 462;  
Best Local Similarity 100.0%; Pred. No. 2.3e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 231 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 290  
QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 291 NWYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 350  
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 351 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 410  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
DB 411 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 462

RESULT 80  
US-10-404-724-8  
Sequence 8, Application US/10404724  
Publication No. US20030203447A1  
GENERAL INFORMATION:  
APPLICANT: Horwitz, Arnold H.  
TITLE OF INVENTION: Methods and Materials For Increasing Expression of Recombinant

TITLE OF INVENTION: Polypeptides  
FILE REFERENCE: 13698US01  
CURRENT APPLICATION NUMBER: US/10/404,724  
CURRENT FILING DATE: 2003-03-31  
PRIOR APPLICATION NUMBER: US 60/368,530  
PRIOR FILING DATE: 2002-03-29  
NUMBER OF SEQ ID NOS: 79  
SOFTWARE: PatentIn version 3.2  
SEQ ID NO 8  
LENGTH: 465  
TYPE: PRT  
ORGANISM: Homo Sapiens  
US-10-404-724-8  
Query Match 100.0%; Score 1263; DB 15; Length 465;  
Best Local Similarity 100.0%; Pred. No. 2.3e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 234 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 293  
QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 294 NWYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353  
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 354 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 413  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
DB 414 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 465

RESULT 81  
US-10-404-724-23  
Sequence 23, Application US/10404724  
Publication No. US20030203447A1  
GENERAL INFORMATION:  
APPLICANT: Horwitz, Arnold H.  
TITLE OF INVENTION: Methods and Materials For Increasing Expression of Recombinant  
FILE REFERENCE: Polypeptides  
FILE REFERENCE: 13698US01  
CURRENT APPLICATION NUMBER: US/10/404,724  
CURRENT FILING DATE: 2003-03-31  
PRIOR APPLICATION NUMBER: US 60/368,530  
PRIOR FILING DATE: 2002-03-29  
NUMBER OF SEQ ID NOS: 79  
SOFTWARE: PatentIn version 3.2  
SEQ ID NO 23  
LENGTH: 465  
TYPE: PRT  
ORGANISM: Homo Sapiens  
US-10-404-724-23

Query Match 100.0%; Score 1263; DB 15; Length 465;  
Best Local Similarity 100.0%; Pred. No. 2.3e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 234 EPKSCDKTHTCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 293  
QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 294 NWYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353  
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 354 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 413  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232

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Db      414  PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNNHYTKQSLSPGK 465
|||||
RESULT 82
US-10-404-724-25
; Sequence 25, Application US/10404724
; Publication No. US20030203447A1
; GENERAL INFORMATION:
; APPLICANT: Horwitz, Arnold H.
; TITLE OF INVENTION: Methods and Materials For Increasing Expression of Recombinant
; FILE REFERENCE: 13698US01
; CURRENT APPLICATION NUMBER: US/10/404,724
; PRIOR FILING DATE: 2003-03-31
; PRIOR APPLICATION NUMBER: US 60/368,530
; PRIOR FILING DATE: 2002-03-29
; NUMBER OF SEQ ID NOS: 79
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 25
; LENGTH: 465
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-404-724-25

Query Match      100.0%; Score 1263; DB 15; Length 465;
Best Local Similarity 100.0%; Pred. No. 2.3e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  EPKSCDKTHTCPPCPAPELLGSPVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db      234  EPKSCDKTHTCPPCPAPELLGSPVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 293
|||||
Qy      61  NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 120
Db      294  NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 353
|||||
Qy      121  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db      354  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413
|||||
Qy      181  PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNNHYTKQSLSPGK 232
Db      414  PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNNHYTKQSLSPGK 465
|||||

RESULT 83
US-10-816-276-4
; Sequence 4, Application US/10816276
; Publication No. US20050009097A1
; GENERAL INFORMATION:
; APPLICANT: Better, Marc D.
; APPLICANT: Horwitz, Arnold H.
; TITLE OF INVENTION: Human Engineered to Antibodies to Ep-CAM
; FILE REFERENCE: 14923US02
; CURRENT APPLICATION NUMBER: US/10/816,276
; CURRENT FILING DATE: 2004-03-31
; PRIOR APPLICATION NUMBER: 60/459,334
; PRIOR FILING DATE: 2003-03-31
; NUMBER OF SEQ ID NOS: 59
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 4
; LENGTH: 465
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-816-276-4

Query Match      100.0%; Score 1263; DB 17; Length 465;
Best Local Similarity 100.0%; Pred. No. 2.3e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  EPKSCDKTHTCPPCPAPELLGSPVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db      234  EPKSCDKTHTCPPCPAPELLGSPVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 293
|||||
Qy      61  NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 120
Db      294  NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 353
|||||
Qy      121  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db      354  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413
|||||
Qy      181  PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNNHYTKQSLSPGK 232
Db      414  PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNNHYTKQSLSPGK 465
|||||

RESULT 84
US-10-816-276-19
; Sequence 19, Application US/10816276
; Publication No. US20050009097A1
; GENERAL INFORMATION:
; APPLICANT: Better, Marc D.
; APPLICANT: Horwitz, Arnold H.
; TITLE OF INVENTION: Human Engineered to Antibodies to Ep-CAM
; FILE REFERENCE: 14923US02
; CURRENT APPLICATION NUMBER: US/10/816,276
; CURRENT FILING DATE: 2004-03-31
; PRIOR APPLICATION NUMBER: 60/459,334
; PRIOR FILING DATE: 2003-03-31
; NUMBER OF SEQ ID NOS: 59
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 19
; LENGTH: 465
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-816-276-19

Query Match      100.0%; Score 1263; DB 17; Length 465;
Best Local Similarity 100.0%; Pred. No. 2.3e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  EPKSCDKTHTCPPCPAPELLGSPVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db      234  EPKSCDKTHTCPPCPAPELLGSPVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 293
|||||
Qy      61  NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 120
Db      294  NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 353
|||||
Qy      121  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db      354  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413
|||||
Qy      181  PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNNHYTKQSLSPGK 232
Db      414  PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNNHYTKQSLSPGK 465
|||||

RESULT 85
US-10-816-276-21
; Sequence 21, Application US/10816276
; Publication No. US20050009097A1
; GENERAL INFORMATION:
; APPLICANT: Better, Marc D.
; APPLICANT: Horwitz, Arnold H.
; TITLE OF INVENTION: Human Engineered to Antibodies to Ep-CAM
; FILE REFERENCE: 14923US02
; CURRENT APPLICATION NUMBER: US/10/816,276
; CURRENT FILING DATE: 2004-03-31
; PRIOR APPLICATION NUMBER: 60/459,334
; PRIOR FILING DATE: 2003-03-31
; NUMBER OF SEQ ID NOS: 59
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 21
; LENGTH: 465
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-816-276-21

Query Match      100.0%; Score 1263; DB 17; Length 465;
Best Local Similarity 100.0%; Pred. No. 2.3e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  EPKSCDKTHTCPPCPAPELLGSPVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db      234  EPKSCDKTHTCPPCPAPELLGSPVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 293
|||||
Qy      61  NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 120
Db      294  NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 353
|||||
Qy      121  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db      354  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413
|||||
Qy      181  PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNNHYTKQSLSPGK 232
Db      414  PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNNHYTKQSLSPGK 465
|||||
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```
Db      234  EPKSCDKTHTCPPCPAPELLGSPVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 293
Qy      61  NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 120
Db      294  NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 353
Qy      121  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db      354  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413
Qy      181  PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNNHYTKQSLSPGK 232
Db      414  PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNNHYTKQSLSPGK 465
|||||
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RESULT 84
US-10-816-276-19
; Sequence 19, Application US/10816276
; Publication No. US20050009097A1
; GENERAL INFORMATION:
; APPLICANT: Better, Marc D.
; APPLICANT: Horwitz, Arnold H.
; TITLE OF INVENTION: Human Engineered to Antibodies to Ep-CAM
; FILE REFERENCE: 14923US02
; CURRENT APPLICATION NUMBER: US/10/816,276
; CURRENT FILING DATE: 2004-03-31
; PRIOR APPLICATION NUMBER: 60/459,334
; PRIOR FILING DATE: 2003-03-31
; NUMBER OF SEQ ID NOS: 59
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 19
; LENGTH: 465
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-816-276-19
```

```
Query Match      100.0%; Score 1263; DB 17; Length 465;
Best Local Similarity 100.0%; Pred. No. 2.3e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  EPKSCDKTHTCPPCPAPELLGSPVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db      234  EPKSCDKTHTCPPCPAPELLGSPVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 293
|||||
Qy      61  NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 120
Db      294  NWYVDGVEVHNATKPREEOYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 353
|||||
Qy      121  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db      354  ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413
|||||
Qy      181  PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNNHYTKQSLSPGK 232
Db      414  PVLDSGSGFFLYSKLTVDKSRWQGNVFCVSMHEALHNNHYTKQSLSPGK 465
|||||
```

```
RESULT 85
US-10-816-276-21
; Sequence 21, Application US/10816276
; Publication No. US20050009097A1
; GENERAL INFORMATION:
; APPLICANT: Better, Marc D.
; APPLICANT: Horwitz, Arnold H.
; TITLE OF INVENTION: Human Engineered to Antibodies to Ep-CAM
; FILE REFERENCE: 14923US02
; CURRENT APPLICATION NUMBER: US/10/816,276
; CURRENT FILING DATE: 2004-03-31
; PRIOR APPLICATION NUMBER: 60/459,334
; PRIOR FILING DATE: 2003-03-31
; NUMBER OF SEQ ID NOS: 59
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 21
; LENGTH: 465
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-816-276-21
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; LENGTH: 465
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-816-278-21

Query Match      100.0%; Score 1263; DB 17; Length 465;
Best Local Similarity 100.0%; Pred. No. 2.3e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 234 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 293

QY 61 NWYVDGVEVHNAKTPREBQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 294 NWYVDGVEVHNAKTPREBQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 354 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 413

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVWHEALHNHYTQKSLSLSPGK 232
DB 414 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVWHEALHNHYTQKSLSLSPGK 465

RESULT 86
US-10-108-260A-4293
; Sequence 4293, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
; APPLICANT: HELIX RESEARCH INSTITUTE
; TITLE OF INVENTION: No. US20040005560A1el full length cdna
; FILE REFERENCE: H1-A0106
; CURRENT APPLICATION NUMBER: US/10/108, 260A
; NUMBER OF SEQ ID NOS: 5458
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4293
; LENGTH: 467
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-108-260A-4293

Query Match      100.0%; Score 1263; DB 15; Length 467;
Best Local Similarity 100.0%; Pred. No. 2.3e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 236 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 295

QY 61 NWYVDGVEVHNAKTPREBQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 296 NWYVDGVEVHNAKTPREBQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 355

QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 356 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 415

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVWHEALHNHYTQKSLSLSPGK 232
DB 416 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVWHEALHNHYTQKSLSLSPGK 467

RESULT 87
US-10-656-769-32
; Sequence 32, Application US/10656769
; Publication No. US20040097712A1
; GENERAL INFORMATION:
; APPLICANT: Varnum, Brian
; APPLICANT: Witte, Allison
; APPLICANT: Vezina, Chris
; APPLICANT: Wong, Lu Min
; APPLICANT: Oian, Xueming
; TITLE OF INVENTION: Therapeutic Human Anti-IL-1R Monoclonal Antibody
; FILE REFERENCE: 01.1554
; CURRENT APPLICATION NUMBER: US/10/656,769
; NUMBER OF SEQ ID NOS: 79
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
; LENGTH: 469
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-656-769-32

Query Match      100.0%; Score 1263; DB 15; Length 469;
Best Local Similarity 100.0%; Pred. No. 2.3e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 238 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 297

QY 61 NWYVDGVEVHNAKTPREBQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 298 NWYVDGVEVHNAKTPREBQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 357

QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 358 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 417
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; APPLICANT: Wong, Lu Min
; APPLICANT: Oian, Xueming
; TITLE OF INVENTION: Therapeutic Human Anti-IL-1R Monoclonal Antibody
; FILE REFERENCE: 01.1554
; CURRENT APPLICATION NUMBER: US/10/656,769
; CURRENT FILING DATE: 2003-09-05
; NUMBER OF SEQ ID NOS: 79
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 32
; LENGTH: 467
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-656-769-32

Query Match      100.0%; Score 1263; DB 15; Length 467;
Best Local Similarity 100.0%; Pred. No. 2.3e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 236 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 295

QY 61 NWYVDGVEVHNAKTPREBQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 296 NWYVDGVEVHNAKTPREBQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 355

QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 356 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 415

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVWHEALHNHYTQKSLSLSPGK 232
DB 416 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSVWHEALHNHYTQKSLSLSPGK 467

RESULT 88
US-10-656-769-20
; Sequence 20, Application US/10656769
; Publication No. US20040097712A1
; GENERAL INFORMATION:
; APPLICANT: Varnum, Brian
; APPLICANT: Witte, Allison
; APPLICANT: Vezina, Chris
; APPLICANT: Wong, Lu Min
; APPLICANT: Oian, Xueming
; TITLE OF INVENTION: Therapeutic Human Anti-IL-1R Monoclonal Antibody
; FILE REFERENCE: 01.1554
; CURRENT APPLICATION NUMBER: US/10/656,769
; CURRENT FILING DATE: 2003-09-05
; NUMBER OF SEQ ID NOS: 79
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
; LENGTH: 469
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-656-769-20

Query Match      100.0%; Score 1263; DB 15; Length 469;
Best Local Similarity 100.0%; Pred. No. 2.3e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 238 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDRLMISRTPEVTCVVVDVSHEDPEVKF 297

QY 61 NWYVDGVEVHNAKTPREBQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 298 NWYVDGVEVHNAKTPREBQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 357

QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 358 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 417
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QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTOKSLSPGK 232  
Db 418 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTOKSLSPGK 469

## RESULT 89

US-10-656-769-26  
; Sequence 26, Application US/10656769  
; Publication No. US20040097712A1  
; GENERAL INFORMATION:  
; APPLICANT: Varnum, Brian  
; APPLICANT: Witte, Alison  
; APPLICANT: Vezina, Chris  
; APPLICANT: Wong, Lu Min  
; APPLICANT: Qian, Xueming  
; TITLE OF INVENTION: Therapeutic Human Anti-IL-1R Monoclonal Antibody  
; FILE REFERENCE: 01,1554  
; CURRENT APPLICATION NUMBER: US/10/656,769  
; CURRENT FILING DATE: 2003-09-05  
; NUMBER OF SEQ ID NOS: 79  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 26  
; LENGTH: 469  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-656-769-26

Query Match 100.0%; Score 1263; DB 15; Length 469;  
Best Local Similarity 100.0%; Pred. No. 2.3e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 238 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 297  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEVESNGQPENNYKTTTP 120  
Db 298 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEVESNGQPENNYKTTTP 357  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 180  
Db 358 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 417  
QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTOKSLSPGK 232  
Db 418 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTOKSLSPGK 469

## RESULT 90

US-10-104-047-3730  
; Sequence 3730, Application US/10104047  
; Publication No. US20030236392A1  
; GENERAL INFORMATION:  
; APPLICANT: HELIX RESEARCH INSTITUTE  
; TITLE OF INVENTION: No. US20030236392A1 full length cDNA  
; FILE REFERENCE: H1-A0105  
; CURRENT APPLICATION NUMBER: US/10/104,047  
; CURRENT FILING DATE: 2002-03-25  
; PRIOR APPLICATION NUMBER:  
; PRIOR FILING DATE:  
; NUMBER OF SEQ ID NOS: 4096  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 3730  
; LENGTH: 470  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-104-047-3730

Query Match 100.0%; Score 1263; DB 15; Length 470;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60

Db 239 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 298  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEVESNGQPENNYKTTTP 120  
Db 299 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEVESNGQPENNYKTTTP 358  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 180  
Db 359 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 418  
QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTOKSLSPGK 232  
Db 419 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTOKSLSPGK 470

## RESULT 91

US-10-108-260A-4285  
; Sequence 4285, Application US/10108260A  
; Publication No. US20040005560A1  
; GENERAL INFORMATION:  
; APPLICANT: HELIX RESEARCH INSTITUTE  
; TITLE OF INVENTION: No. US20040005560A1 full length cDNA  
; FILE REFERENCE: H1-A0106  
; CURRENT APPLICATION NUMBER: US/10/108,260A  
; CURRENT FILING DATE: 2002-03-27  
; NUMBER OF SEQ ID NOS: 5458  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 4285  
; LENGTH: 471  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-108-260A-4285

Query Match 100.0%; Score 1263; DB 15; Length 471;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 240 EPKSCDKTHTCPPCAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 299  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEVESNGQPENNYKTTTP 120  
Db 300 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPYPSDIAVEVESNGQPENNYKTTTP 359  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 180  
Db 360 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 419  
QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTOKSLSPGK 232  
Db 420 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTOKSLSPGK 471

## RESULT 92

US-10-108-260A-4294  
; Sequence 4294, Application US/10108260A  
; Publication No. US20040005560A1  
; GENERAL INFORMATION:  
; APPLICANT: HELIX RESEARCH INSTITUTE  
; TITLE OF INVENTION: No. US20040005560A1 full length cDNA  
; FILE REFERENCE: H1-A0106  
; CURRENT APPLICATION NUMBER: US/10/108,260A  
; CURRENT FILING DATE: 2002-03-27  
; NUMBER OF SEQ ID NOS: 5458  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 4294  
; LENGTH: 471  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-108-260A-4294

Query Match 100.0%; Score 1263; DB 15; Length 471;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 240 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 299  
  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 300 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 359  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 360 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 419  
  
QY 181 PVLDSGDSFFLYSKLTVDKSRWQOGNVFSCSVMEALHNNHYTKSLSLSPGK 232  
DB 420 PVLDSGDSFFLYSKLTVDKSRWQOGNVFSCSVMEALHNNHYTKSLSLSPGK 471

RESULT 93  
US-10-108-260A-4073  
; Sequence 4073, Application US/10108260A  
; Publication No. US20040005560A1  
; GENERAL INFORMATION:  
; APPLICANT: HELIX RESEARCH INSTITUTE  
; TITLE OF INVENTION: No. US20040005560A1 full length cDNA  
; FILE REFERENCE: H1-A0106  
; CURRENT APPLICATION NUMBER: US/10/108,260A  
; CURRENT FILING DATE: 2002-03-27  
; NUMBER OF SEQ ID NOS: 5458  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 4073  
; LENGTH: 472  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-108-260A-4073

Query Match 100.0%; Score 1263; DB 15; Length 472;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 241 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 300  
  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 301 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 360  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 361 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 420  
  
QY 181 PVLDSGDSFFLYSKLTVDKSRWQOGNVFSCSVMEALHNNHYTKSLSLSPGK 232  
DB 421 PVLDSGDSFFLYSKLTVDKSRWQOGNVFSCSVMEALHNNHYTKSLSLSPGK 472

RESULT 94  
US-10-108-260A-4284  
; Sequence 4284, Application US/10108260A  
; Publication No. US20040005560A1  
; GENERAL INFORMATION:  
; APPLICANT: HELIX RESEARCH INSTITUTE  
; TITLE OF INVENTION: No. US20040005560A1 full length cDNA  
; FILE REFERENCE: H1-A0106  
; CURRENT APPLICATION NUMBER: US/10/108,260A  
; CURRENT FILING DATE: 2002-03-27  
; NUMBER OF SEQ ID NOS: 5458  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 4284

LENGTH: 473  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-10-108-260A-4284  
  
Query Match 100.0%; Score 1263; DB 15; Length 473;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 242 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 301  
  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 302 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 361  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 421  
  
QY 181 PVLDSGDSFFLYSKLTVDKSRWQOGNVFSCSVMEALHNNHYTKSLSLSPGK 232  
DB 422 PVLDSGDSFFLYSKLTVDKSRWQOGNVFSCSVMEALHNNHYTKSLSLSPGK 473

RESULT 95  
US-10-108-260A-4282  
; Sequence 4282, Application US/10108260A  
; Publication No. US20040005560A1  
; GENERAL INFORMATION:  
; APPLICANT: HELIX RESEARCH INSTITUTE  
; TITLE OF INVENTION: No. US20040005560A1 full length cDNA  
; FILE REFERENCE: H1-A0106  
; CURRENT APPLICATION NUMBER: US/10/108,260A  
; CURRENT FILING DATE: 2002-03-27  
; NUMBER OF SEQ ID NOS: 5458  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 4282  
; LENGTH: 474  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-108-260A-4282

Query Match 100.0%; Score 1263; DB 15; Length 474;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 243 EPKSCDKTHTCPCPAPELLGGPSVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 302  
  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 303 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 362  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 363 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 422  
  
QY 181 PVLDSGDSFFLYSKLTVDKSRWQOGNVFSCSVMEALHNNHYTKSLSLSPGK 232  
DB 423 PVLDSGDSFFLYSKLTVDKSRWQOGNVFSCSVMEALHNNHYTKSLSLSPGK 474

RESULT 96  
US-09-740-002-27  
; Sequence 27, Application US/09740002  
; Patent No. US20020001798A1  
; GENERAL INFORMATION:  
; APPLICANT: BRAMS, PETER  
; APPLICANT: MORROW, PHILLIP  
; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES

;; TITLE OF INVENTION: SPECIFIC TO RSV P-PROTEIN AND METHODS FOR THEIR  
;; FILE REFERENCE: MANUFACTURE AND THERAPEUTIC USE THEREOF  
;; CURRENT APPLICATION NUMBER: US/09/740,002  
;; CURRENT FILING DATE: 2000-12-20  
;; PRIOR APPLICATION NUMBER: 09/335,697  
;; PRIOR FILING DATE: 1999-06-18  
;; PRIOR APPLICATION NUMBER: 08/488,376  
;; PRIOR FILING DATE: 1995-06-07  
;; NUMBER OF SEQ ID NOS: 27  
;; SOFTWARE: PatentIn Ver. 2.1  
;; SEQ ID NO 27  
;; LENGTH: 475  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
US-09-740-002-27

Query Match 100.0%; Score 1263; DB 9; Length 475;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 244 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 303  
QY 61 NTYVDGVEVHNAKTPREEQYNSTYRVSVLTCLVKGFPYSDIAVEVESNGQPENNYKTTTP 120  
DB 304 NTYVDGVEVHNAKTPREEQYNSTYRVSVLTCLVKGFPYSDIAVEVESNGQPENNYKTTTP 363  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 180  
DB 364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 423  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSVHNEALHNHYTQKSLSLSPGK 232  
DB 424 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSVHNEALHNHYTQKSLSLSPGK 475

RESULT 97  
US-10-325-698-27  
; Sequence 27, Application US/10325698  
; Publication No. US20040076631A1  
; GENERAL INFORMATION:  
; APPLICANT: BRAMS, PETER  
; APPLICANT: MORROW, PHILLIP  
; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES  
; TITLE OF INVENTION: SPECIFIC TO RSV P-PROTEIN AND METHODS FOR THEIR  
; FILE REFERENCE: MANUFACTURE AND THERAPEUTIC USE THEREOF  
; FILE REFERENCE: 037003-0275759  
; CURRENT APPLICATION NUMBER: US/10/325,698  
; CURRENT FILING DATE: 2002-12-19  
; PRIOR APPLICATION NUMBER: US/09/740,002  
; PRIOR FILING DATE: 2000-12-20  
; PRIOR APPLICATION NUMBER: 09/335,697  
; PRIOR FILING DATE: 1999-06-18  
; PRIOR APPLICATION NUMBER: 08/488,376  
; PRIOR FILING DATE: 1995-06-07  
; NUMBER OF SEQ ID NOS: 27  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 27  
; LENGTH: 475  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-325-698-27

Query Match 100.0%; Score 1263; DB 15; Length 475;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 244 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 303

QY 61 NTYVDGVEVHNAKTPREEQYNSTYRVSVLTCLVKGFPYSDIAVEVESNGQPENNYKTTTP 120  
DB 304 NTYVDGVEVHNAKTPREEQYNSTYRVSVLTCLVKGFPYSDIAVEVESNGQPENNYKTTTP 363  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 180  
DB 364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 423  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSVHNEALHNHYTQKSLSLSPGK 232  
DB 424 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSVHNEALHNHYTQKSLSLSPGK 475

RESULT 98  
US-09-758-173-4  
; Sequence 4, Application US/09758173  
; Publication No. US20010024648A1  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Darrell R.  
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,  
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
; STREET: 699 Prince Street  
; CITY: Alexandria  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22314  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/758,173  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 09/383,916  
; FILING DATE:  
; APPLICATION NUMBER: US 08/487,550  
; FILING DATE: 07-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Teekin, Robin L.  
; REGISTRATION NUMBER: 35,030  
; REFERENCE/DOCKET NUMBER: 012712-131  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-836-6620  
; TELEFAX: 703-836-2021  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 476 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-09-758-173-4

Query Match 100.0%; Score 1263; DB 9; Length 476;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 245 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 304  
QY 61 NTYVDGVEVHNAKTPREEQYNSTYRVSVLTCLVKGFPYSDIAVEVESNGQPENNYKTTTP 120  
DB 305 NTYVDGVEVHNAKTPREEQYNSTYRVSVLTCLVKGFPYSDIAVEVESNGQPENNYKTTTP 364  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVESNGQPENNYKTTTP 180

Db 365 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 424  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMHEALHNHYTQKSLSLSPGK 232  
Db 425 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMHEALHNHYTQKSLSLSPGK 476

RESULT 99  
US-09-758-173-12  
; Sequence 12, Application US/09758173  
; Publication No. US20010024648A1  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Darrell R.  
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF.  
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
; STREET: 699 Prince Street  
; CITY: Alexandria  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22314  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/758,173  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 09/383,916  
; FILING DATE:  
; APPLICATION NUMBER: US 08/487,550  
; FILING DATE: 07-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Teskin, Robin L.  
; REGISTRATION NUMBER: 35,030  
; REFERENCE/DOCKET NUMBER: 012712-131  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-836-6620  
; TELEFAX: 703-836-2021  
; INFORMATION FOR SEQ ID NO: 12:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 476 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-09-758-173-12

Query Match 100.0%; Score 1263; DB 9; Length 476;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 245 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
Db 365 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 424

QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMHEALHNHYTQKSLSLSPGK 232  
Db 425 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMHEALHNHYTQKSLSLSPGK 476

RESULT 101  
US-09-948-429B-4  
; Sequence 4, Application US/09948429B  
; Patent No. US20020177689A1  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Darrell R.  
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,  
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
; STREET: 699 Prince Street  
; CITY: Alexandria  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22314  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.30

Db 425 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMHEALHNHYTQKSLSLSPGK 476

RESULT 100  
US-09-747-669-3  
; Sequence 3, Application US/09747669  
; Patent No. US20020122807A1  
; GENERAL INFORMATION:  
; APPLICANT: Dan, Michael D.  
; APPLICANT: Saleh, Mansoor  
; TITLE OF INVENTION: ANTIGEN BINDING FRAGMENTS, DESIGNATED  
; TITLE OF INVENTION: 4B5 THAT SPECIFICALLY DETECT CANCER CELLS, NUCLEOTIDES  
; TITLE OF INVENTION: ENCODING THE FRAGMENTS, AND USE THEREOF FOR THE PROPHYLAXIS  
; TITLE OF INVENTION: AND DETECTION OF CANCERS  
; FILE REFERENCE: 316082001001  
; CURRENT APPLICATION NUMBER: US/09/747,669  
; CURRENT FILING DATE: 2002-04-08  
; PRIOR APPLICATION NUMBER: US 09/111,286  
; PRIOR FILING DATE: 1998-07-07  
; NUMBER OF SEQ ID NOS: 7  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 3  
; LENGTH: 476  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic construct  
US-09-747-669-3

Query Match 100.0%; Score 1263; DB 9; Length 476;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 245 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
Db 365 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 424

QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMHEALHNHYTQKSLSLSPGK 232  
Db 425 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMHEALHNHYTQKSLSLSPGK 476

RESULT 101  
US-09-948-429B-4  
; Sequence 4, Application US/09948429B  
; Patent No. US20020177689A1  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Darrell R.  
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,  
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
; STREET: 699 Prince Street  
; CITY: Alexandria  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22314  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.30

;; CURRENT APPLICATION DATA: US/09/948,429B  
;; FILING DATE: 07-JUN-1995  
;; CLASSIFICATION:  
;; PRIOR APPLICATION NUMBER: 09/383,916  
;; FILING DATE: 07-JUN-1995  
;; APPLICATION NUMBER: US 08/487,550  
;; FILING DATE: 07-JUN-1995  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Teskin, Robin L.  
;; REGISTRATION NUMBER: 35,030  
;; REFERENCE/DOCKET NUMBER: 012712-131  
;; TELEPHONE: 703-836-6620  
;; TELEFAX: 703-836-2021  
;; INFORMATION FOR SEQ ID NO: 4:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 476 amino acids  
;; TYPE: amino acid  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: protein  
;; US-09-948-429B-4

Query Match 100.0%; Score 1263; DB 9; Length 476;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 245 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 304  
  
QY 61 NWVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120  
DB 305 NWVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 364  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 424  
  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 425 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 476

RESULT 102  
US-09-948-429B-12  
;; Sequence 12, Application US/09948429B  
;; Patent No. US20020177689A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Anderson, Darrell R.  
;; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
;; TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,  
;; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
;; IMMUNOSUPPRESSANTS"  
;; NUMBER OF SEQUENCES: 12  
;; CORRESPONDENCE ADDRESS:  
;; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
;; STREET: 699 Prince Street  
;; CITY: Alexandria  
;; STATE: VA  
;; COUNTRY: USA  
;; ZIP: 22314  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: Floppy disk  
;; COMPUTER: IBM PC compatible  
;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: Patent In Release #1.0, Version #1.30  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/09/948,429B  
;; FILING DATE:  
;; CLASSIFICATION:  
;; PRIOR APPLICATION DATA:

;; APPLICATION NUMBER: 09/383,916  
;; FILING DATE: 07-JUN-1995  
;; CLASSIFICATION:  
;; PRIOR APPLICATION NUMBER: 09/383,916  
;; FILING DATE: 07-JUN-1995  
;; APPLICATION NUMBER: US 08/487,550  
;; FILING DATE: 07-JUN-1995  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Teskin, Robin L.  
;; REGISTRATION NUMBER: 35,030  
;; REFERENCE/DOCKET NUMBER: 012712-131  
;; TELEPHONE: 703-836-6620  
;; TELEFAX: 703-836-2021  
;; INFORMATION FOR SEQ ID NO: 12:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 476 amino acids  
;; TYPE: amino acid  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: protein  
;; US-09-948-429B-12  
  
Query Match 100.0%; Score 1263; DB 9; Length 476;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 245 EPKSCDKTHTCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 304  
  
QY 61 NWVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 120  
DB 305 NWVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYKCKVSNKALPAPIEKT 364  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 424  
  
QY 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232  
DB 425 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK 476

RESULT 103  
US-10-124-905-4  
;; Sequence 4, Application US/10124905  
;; Publication No. US20020166136A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Anderson, Darrell R.  
;; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
;; TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,  
;; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
;; IMMUNOSUPPRESSANTS"  
;; NUMBER OF SEQUENCES: 12  
;; CORRESPONDENCE ADDRESS:  
;; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
;; STREET: 699 Prince Street  
;; CITY: Alexandria  
;; STATE: VA  
;; COUNTRY: USA  
;; ZIP: 22314  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: Floppy disk  
;; COMPUTER: IBM PC compatible  
;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: Patent In Release #1.0, Version #1.30  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/10/124,905  
;; FILING DATE:  
;; CLASSIFICATION:  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 09/383,916  
;; FILING DATE: 07-JUN-1995  
;; ATTORNEY/AGENT INFORMATION:

```
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 476 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-10-124-905-4

Query Match 100.0%; Score 1263; DB 13; Length 476;
Best Local Similarity 100.0%; Pred. No. 2.4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 245 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 304

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 424

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFSVCSVMHEALHNHYTQKSLSLSPGK 232
DB 425 PVLDSGSPFLYSKLTVDKSRWQQGNVFSVCSVMHEALHNHYTQKSLSLSPGK 476

RESULT 104
US-10-124-905-12
; Sequence 12, Application US/10124905
; Publication No. US20020166136A1
; GENERAL INFORMATION:
; APPLICANT: Anderson, Darrell R.
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
; TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
; STREET: 699 Prince Street
; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/124,905
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/383,916
; FILING DATE:
; APPLICATION NUMBER: US 08/487,550
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
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; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 476 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-10-124-905-12

Query Match 100.0%; Score 1263; DB 13; Length 476;
Best Local Similarity 100.0%; Pred. No. 2.4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 245 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 304

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 424

QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFSVCSVMHEALHNHYTQKSLSLSPGK 232
DB 425 PVLDSGSPFLYSKLTVDKSRWQQGNVFSVCSVMHEALHNHYTQKSLSLSPGK 476

RESULT 105
US-10-290-703-3
; Sequence 3, Application US/10290703
; Publication No. US20030118593A1
; GENERAL INFORMATION:
; APPLICANT: Saleh, Mansoor
; APPLICANT: Dan, Michael D.
; TITLE OF INVENTION: ANTIGEN BINDING FRAGMENTS, DESIGNATED
; TITLE OF INVENTION: 4B5, THAT SPECIFICALLY DETECT CANCER CELLS, NUCLEOTIDES
; TITLE OF INVENTION: ENCODING THE FRAGMENTS, AND USE THEREOF FOR THE PROPHYLAXIS
; TITLE OF INVENTION: AND DETECTION OF CANCERS
; FILE REFERENCE: 316082001002
; CURRENT APPLICATION NUMBER: US/10/290,703
; CURRENT FILING DATE: 2002-11-08
; PRIOR APPLICATION NUMBER: US 09/747,669
; PRIOR FILING DATE: 2000-12-21
; PRIOR APPLICATION NUMBER: US 09/111,286
; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: US 60/051,945
; PRIOR FILING DATE: 1997-07-08
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 476
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; US-10-290-703-3

Query Match 100.0%; Score 1263; DB 14; Length 476;
Best Local Similarity 100.0%; Pred. No. 2.4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 245 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 304

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
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||||| 365 ISKAKGQPREQVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPNKYKTP 424  
||||| 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
||||| 425 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 476

RESULT 106  
US-10-124-807-4  
; Sequence 4, Application US/10124807  
; Publication No. US20030166207A1  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Darrell R.  
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
; TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF."  
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
; STREET: 699 Prince Street  
; CITY: Alexandria  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22314  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/124,807  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 09/383,916  
; FILING DATE:  
; APPLICATION NUMBER: US 08/487,550  
; FILING DATE: 07-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Teskin, Robin L.  
; REGISTRATION NUMBER: 35,030  
; REFERENCE/DOCKET NUMBER: 012712-131  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-836-6620  
; TELEFAX: 703-836-2021  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 476 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; US-10-124-807-4

Query Match 100.0%; Score 1263; DB 14; Length 476;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 245 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 304

Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPSPDI AVEWESNGQPNKYKTP 120  
Db 305 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPSPDI AVEWESNGQPNKYKTP 364

Qy 121 ISKAKGQPREQVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPNKYKTP 180  
Db 365 ISKAKGQPREQVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPNKYKTP 424

Qy 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
Db 425 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 476

RESULT 108  
US-10-291-532-4  
||||| 365 ISKAKGQPREQVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPNKYKTP 424  
||||| 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
||||| 425 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 476

Db 425 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 476

RESULT 107  
US-10-124-807-12  
; Sequence 12, Application US/10124807  
; Publication No. US20030166207A1  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Darrell R.  
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC  
; TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF."  
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS  
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
; STREET: 699 Prince Street  
; CITY: Alexandria  
; STATE: VA  
; COUNTRY: USA  
; ZIP: 22314  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/124,807  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 09/383,916  
; FILING DATE:  
; APPLICATION NUMBER: US 08/487,550  
; FILING DATE: 07-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Teskin, Robin L.  
; REGISTRATION NUMBER: 35,030  
; REFERENCE/DOCKET NUMBER: 012712-131  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 703-836-6620  
; TELEFAX: 703-836-2021  
; INFORMATION FOR SEQ ID NO: 12:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 476 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; US-10-124-807-12

Query Match 100.0%; Score 1263; DB 14; Length 476;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 245 EPKSCDKHTCCPCPAPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 304

Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPSPDI AVEWESNGQPNKYKTP 120  
Db 305 NWYVDGVEVHNATKPREEQYNSTYRVSVLTCLVKGFPSPDI AVEWESNGQPNKYKTP 364

Qy 121 ISKAKGQPREQVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPNKYKTP 180  
Db 365 ISKAKGQPREQVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPNKYKTP 424

Qy 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
Db 425 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 476

RESULT 108  
US-10-291-532-4  
||||| 365 ISKAKGQPREQVYTLPPSRDELTKQVSLTCLVKGFPSPDI AVEWESNGQPNKYKTP 424  
||||| 181 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
||||| 425 PVLDSGSPFLYSLKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 476

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; Sequence 4, Application US/10291532
; Publication No. US20030180290A1
; GENERAL INFORMATION:
; APPLICANT: HARIHARAN, KANDASAMY
; APPLICANT: HANNA, NABIL
; TITLE OF INVENTION: ANTI-CD80 ANTIBODY HAVING ADCC ACTIVITY FOR ADCC
; TITLE OF INVENTION: MEDIATED KILLING OF B CELL LYMPHOMA CELLS ALONE OR IN
; TITLE OF INVENTION: COMBINATION WITH OTHER THERAPIES
; FILE REFERENCE: 037003/291872
; CURRENT APPLICATION NUMBER: US/10/291,532
; CURRENT FILING DATE: 2002-11-12
; PRIOR APPLICATION NUMBER: 60/331,187
; PRIOR FILING DATE: 2001-11-09
; PRIOR APPLICATION NUMBER: 09/758,173
; PRIOR FILING DATE: 2001-01-12
; PRIOR APPLICATION NUMBER: 09/383,916
; PRIOR FILING DATE: 1999-08-26
; PRIOR APPLICATION NUMBER: 08/487,950
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 476
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: primatized peptide sequence
US-10-291-532-4

Query Match          100.0%; Score 1263; DB 14; Length 476;
Best Local Similarity 100.0%; Pred. No. 2.4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 245 EPKSCDKHTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 424
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232
DB 425 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 476

RESULT 109
US-10-291-532-12
; Sequence 12, Application US/10291532
; Publication No. US20030180290A1
; GENERAL INFORMATION:
; APPLICANT: HARIHARAN, KANDASAMY
; APPLICANT: HANNA, NABIL
; TITLE OF INVENTION: ANTI-CD80 ANTIBODY HAVING ADCC ACTIVITY FOR ADCC
; TITLE OF INVENTION: MEDIATED KILLING OF B CELL LYMPHOMA CELLS ALONE OR IN
; TITLE OF INVENTION: COMBINATION WITH OTHER THERAPIES
; FILE REFERENCE: 037003/291872
; CURRENT APPLICATION NUMBER: US/10/291,532
; CURRENT FILING DATE: 2002-11-12
; PRIOR APPLICATION NUMBER: 60/331,187
; PRIOR FILING DATE: 2001-11-09
; PRIOR APPLICATION NUMBER: 09/758,173
; PRIOR FILING DATE: 2001-01-12
; PRIOR APPLICATION NUMBER: 09/383,916
; PRIOR FILING DATE: 1999-08-26
; PRIOR APPLICATION NUMBER: 08/487,950
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 12
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; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
; LENGTH: 476
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: primatized peptide sequence
US-10-291-532-12

Query Match          100.0%; Score 1263; DB 14; Length 476;
Best Local Similarity 100.0%; Pred. No. 2.4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 245 EPKSCDKHTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 424
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232
DB 425 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 476

RESULT 110
US-10-409-938-15
; Sequence 15, Application US/10409938
; Publication No. US20030219733A1
; GENERAL INFORMATION:
; APPLICANT: Clark et al.
; TITLE OF INVENTION: ANTIBODY GENE TRANSFER AND RECOMBINANT AAV THEREFOR
; FILE REFERENCE: 28335/39282
; CURRENT APPLICATION NUMBER: US/10/409,938
; PRIOR FILING DATE: 2003-04-09
; PRIOR APPLICATION NUMBER: US 60/371,501
; PRIOR FILING DATE: 2002-04-09
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 15
; LENGTH: 476
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-409-938-15

Query Match          100.0%; Score 1263; DB 15; Length 476;
Best Local Similarity 100.0%; Pred. No. 2.4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 245 EPKSCDKHTHTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 305 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 424
QY 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232
DB 425 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 476

RESULT 111
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US-10-108-260A-4288
; Sequence 4288, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
; APPLICANT: HELIX RESEARCH INSTITUTE
; TITLE OF INVENTION: No. US20040005560A1el full length cDNA
; FILE REFERENCE: HI-A0106
; CURRENT APPLICATION NUMBER: US/10/108,260A
; CURRENT FILING DATE: 2002-03-27
; NUMBER OF SEQ ID NOS: 5458
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4288
; LENGTH: 476
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-108-260A-4288

Query Match          100.0%; Score 1263; DB 15; Length 476;
Best Local Similarity 100.0%; Pred. No. 2.4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 245 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 304
Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 120
Db 305 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 364
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
Db 365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 424
Qy 181 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
Db 425 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 476

RESULT 112
US-10-108-260A-4289
; Sequence 4289, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
; APPLICANT: HELIX RESEARCH INSTITUTE
; TITLE OF INVENTION: No. US20040005560A1el full length cDNA
; FILE REFERENCE: HI-A0106
; CURRENT APPLICATION NUMBER: US/10/108,260A
; CURRENT FILING DATE: 2002-03-27
; NUMBER OF SEQ ID NOS: 5458
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4289
; LENGTH: 477
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-108-260A-4289

Query Match          100.0%; Score 1263; DB 15; Length 477;
Best Local Similarity 100.0%; Pred. No. 2.4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 246 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 305
Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 120
Db 306 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 365
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
Db 366 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 425
Qy 181 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
Db 427 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 478

US-09-758-173-8
; Sequence 8, Application US/09758173
; Publication No. US20010024648A1
; GENERAL INFORMATION:
; APPLICANT: Anderson, Darrell R.
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF.
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS IMMUNOSUPPRESSANTS"
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
; STREET: 699 Prince Street
; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/758,173
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/383,916
; FILING DATE:
; APPLICATION NUMBER: US 08/487,550
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 478 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-758-173-8

Query Match          100.0%; Score 1263; DB 9; Length 478;
Best Local Similarity 100.0%; Pred. No. 2.4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 247 EPKSCDKTHCTCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF 306
Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 120
Db 307 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDLNKGKEYCKVSNKALPAPIEKT 366
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180
Db 367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 426
Qy 181 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 232
Db 427 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK 478

RESULT 114
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US-09-948-429B-8
; Sequence 8, Application US/09948429B
; Patent No. US20020177689A1
; GENERAL INFORMATION:
; APPLICANT: Anderson, Darrell R.
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
; TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
; IMMUNOSUPPRESSANTS"
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
; STREET: 699 Prince Street
; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/948,429B
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/383,916
; FILING DATE:
; FILING DATE: 07-JUN-1995
; APPLICATION NUMBER: US 08/487,550
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 478 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-948-429B-8

Query Match 100.0%; Score 1263; DB 9; Length 478;
Best Local Similarity 100.0%; Pred. No. 2.4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 247 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVVDVSHEDPEVKF 306
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKKEYCKVSNKALPAPIEKT 120
DB 307 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHODWLNKKEYCKVSNKALPAPIEKT 366
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 426
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
DB 427 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPGK 478

RESULT 115
US-10-124-905-8
; Sequence 8, Application US/10124905
; Publication No. US20020166136A1
; GENERAL INFORMATION:
; APPLICANT: Anderson, Darrell R.
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
; TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
; IMMUNOSUPPRESSANTS"
; NUMBER OF SEQUENCES: 12
```

; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS  
 ; STREET: 699 Prince Street  
 ; CITY: Alexandria  
 ; STATE: VA  
 ; COUNTRY: USA  
 ; ZIP: 22314  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/10/124,807  
 ; FILING DATE:  
 ; CLASSIFICATION:  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: 09/383,916  
 ; FILING DATE:  
 ; APPLICATION NUMBER: US 08/487,550  
 ; FILING DATE: 07-JUN-1995  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Teskin, Robin L.  
 ; REGISTRATION NUMBER: 35,030  
 ; REFERENCE/DOCKET NUMBER: 012712-131  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 703-836-6620  
 ; TELEFAX: 703-836-2021  
 ; INFORMATION FOR SEQ ID NO: 8:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 478 amino acids  
 ; TYPE: amino acid  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: protein  
 ; US-10-124-807-8

Query Match 100.0%; Score 1263; DB 14; Length 478;  
 Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 247 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 306  
 QY 61 NMYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 307 NMYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 426  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCVSMVHEALHNHYTQKSLSLSPGK 232  
 DB 427 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCVSMVHEALHNHYTQKSLSLSPGK 478  
 RESULT 117  
 US-10-291-532-8  
 ; Sequence 8, Application US/10291532  
 ; Publication No. US20030180290A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: HARIHARAN, KANDASAMY  
 ; APPLICANT: HANNA, NABIL  
 ; TITLE OF INVENTION: ANTI-CD80 ANTIBODY HAVING ADCC ACTIVITY FOR ADCC  
 ; TITLE OF INVENTION: MEDIATED KILLING OF B CELL LYMPHOMA CELLS ALONE OR IN  
 ; TITLE OF INVENTION: COMBINATION WITH OTHER THERAPIES  
 ; FILE REFERENCE: 037003/291872  
 ; CURRENT APPLICATION NUMBER: US/10/291,532  
 ; CURRENT FILING DATE: 2002-11-12  
 ; PRIOR APPLICATION NUMBER: 60/331,187  
 ; PRIOR FILING DATE: 2001-11-09  
 ; PRIOR APPLICATION NUMBER: 09/758,173

; PRIOR FILING DATE: 2001-01-12  
 ; PRIOR APPLICATION NUMBER: 09/383,916  
 ; PRIOR FILING DATE: 1999-08-26  
 ; PRIOR APPLICATION NUMBER: 08/487,950  
 ; PRIOR FILING DATE: 1995-06-07  
 ; NUMBER OF SEQ ID NOS: 12  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 8  
 ; LENGTH: 478  
 ; TYPE: PRT  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 ; OTHER INFORMATION: Primatized peptide sequence  
 ; US-10-291-532-8  
 Query Match 100.0%; Score 1263; DB 14; Length 478;  
 Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 247 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKF 306  
 QY 61 NMYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 307 NMYVDGVEVHNATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
 DB 367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 426  
 QY 181 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCVSMVHEALHNHYTQKSLSLSPGK 232  
 DB 427 PVLDSGSPFLYSLKLTVDKSRWQQGNVFCVSMVHEALHNHYTQKSLSLSPGK 478

RESULT 118  
 US-09-875-338-5  
 ; Sequence 5, Application US/09875338  
 ; Patent No. US20020095024A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: MIKESSELL, GLEN E.  
 ; APPLICANT: CHANG, HAN  
 ; APPLICANT: FINGER, JOSHUA N.  
 ; APPLICANT: YANG, GUCHEN  
 ; APPLICANT: LU, PIN  
 ; APPLICANT: ZHOU, XIA-DI  
 ; APPLICANT: PEACH, ROBERT  
 ; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
 ; TITLE OF INVENTION: IMMUNOMODULATION  
 ; FILE REFERENCE: 3053-4071US2  
 ; CURRENT APPLICATION NUMBER: US/09/875,338  
 ; CURRENT FILING DATE: 2001-06-06  
 ; PRIOR APPLICATION NUMBER: 60/272,107  
 ; PRIOR FILING DATE: 2001-02-28  
 ; PRIOR APPLICATION NUMBER: 60/209,811  
 ; PRIOR FILING DATE: 2000-06-06  
 ; NUMBER OF SEQ ID NOS: 94  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 5  
 ; LENGTH: 480  
 ; TYPE: PRT  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 ; OTHER INFORMATION: fusion construct  
 ; US-09-875-338-5  
 Query Match 100.0%; Score 1263; DB 9; Length 480;  
 Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 249 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 308  
Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
Db 309 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 368  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 428  
Qy 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTQKSLSPGK 232  
Db 429 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTQKSLSPGK 480

## RESULT 119

US-10-077-023-5  
; Sequence 5, Application US/10077023  
; Publication No. US20030031675A1  
; GENERAL INFORMATION:  
; APPLICANT: MIKESELL, GLEN E.  
; APPLICANT: CHANG, HAN  
; APPLICANT: FINGER, JOSHUA N.  
; APPLICANT: YANG, GUCHEN  
; APPLICANT: LU, PIN  
; APPLICANT: ZHOU, XIA-DI  
; APPLICANT: PEACH, ROBERT  
; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
; FILE REFERENCE: 3053-4071US3  
; CURRENT APPLICATION NUMBER: US/10/077,023  
; CURRENT FILING DATE: 2002-02-15  
; PRIOR APPLICATION NUMBER: 60/272,107  
; PRIOR FILING DATE: 2001-02-28  
; PRIOR APPLICATION NUMBER: 60/209,811  
; PRIOR FILING DATE: 2000-06-06  
; NUMBER OF SEQ ID NOS: 138  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 5  
; LENGTH: 480  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
; OTHER INFORMATION: fusion construct

## US-10-077-023-5

Query Match 100.0%; Score 1263; DB 14; Length 480;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 249 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 308  
Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
Db 309 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 368  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 428  
Qy 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTQKSLSPGK 232  
Db 429 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTQKSLSPGK 480

## RESULT 120

US-10-077-023-133  
; Sequence 133, Application US/10077023

Publication No. US20030031675A1  
; GENERAL INFORMATION:  
; APPLICANT: MIKESELL, GLEN E.  
; APPLICANT: CHANG, HAN  
; APPLICANT: FINGER, JOSHUA N.  
; APPLICANT: YANG, GUCHEN  
; APPLICANT: LU, PIN  
; APPLICANT: ZHOU, XIA-DI  
; APPLICANT: PEACH, ROBERT  
; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
; FILE REFERENCE: 3053-4071US3  
; CURRENT APPLICATION NUMBER: US/10/077,023  
; CURRENT FILING DATE: 2002-02-15  
; PRIOR APPLICATION NUMBER: 60/272,107  
; PRIOR FILING DATE: 2001-02-28  
; PRIOR APPLICATION NUMBER: 60/209,811  
; PRIOR FILING DATE: 2000-06-06  
; NUMBER OF SEQ ID NOS: 138  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 133  
; LENGTH: 480  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; US-10-077-023-133  
Query Match 100.0%; Score 1263; DB 14; Length 480;  
Best Local Similarity 100.0%; Pred. No. 2.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 249 EPKSCDKTHCTCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 308  
Qy 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120  
Db 309 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 368  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 428  
Qy 181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTQKSLSPGK 232  
Db 429 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTQKSLSPGK 480  
RESULT 121  
US-10-077-023-135  
; Sequence 135, Application US/10077023  
; Publication No. US20030031675A1  
; GENERAL INFORMATION:  
; APPLICANT: MIKESELL, GLEN E.  
; APPLICANT: CHANG, HAN  
; APPLICANT: FINGER, JOSHUA N.  
; APPLICANT: YANG, GUCHEN  
; APPLICANT: LU, PIN  
; APPLICANT: ZHOU, XIA-DI  
; APPLICANT: PEACH, ROBERT  
; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
; FILE REFERENCE: 3053-4071US3  
; CURRENT APPLICATION NUMBER: US/10/077,023  
; CURRENT FILING DATE: 2002-02-15  
; PRIOR APPLICATION NUMBER: 60/272,107  
; PRIOR FILING DATE: 2001-02-28  
; PRIOR APPLICATION NUMBER: 60/209,811  
; PRIOR FILING DATE: 2000-06-06  
; NUMBER OF SEQ ID NOS: 138  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 135  
; LENGTH: 480  
; TYPE: PRT

```
; ORGANISM: Homo sapiens
US-10-077-023-135

Query Match      100.0%; Score 1263; DB 14; Length 480;
Best Local Similarity 100.0%; Pred. No. 2.4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCTCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 249 EPKSCDKHTCTCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 308
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 309 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 428
QY 181 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232
DB 429 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 480

RESULT 122
US-10-468-333-7
; Sequence 7, Application US/10468333
; Publication No. US20040076992A1
; GENERAL INFORMATION:
; APPLICANT: Nakamura, Yusuke
; APPLICANT: Sugano, Sumio
; APPLICANT: Kato, Yutaka
; APPLICANT: Takahashi, Tomohiro
; APPLICANT: Shirakawa, Kamon
; TITLE OF INVENTION: Novel Cell Adhesion Molecule of Activated Leukocyte
; FILE REFERENCE: 03-775
; CURRENT APPLICATION NUMBER: US/10/468,333
; PRIOR FILING DATE: 2003-08-15
; PRIOR APPLICATION NUMBER: PCT/JP02/01321
; PRIOR FILING DATE: 2002-02-15
; PRIOR APPLICATION NUMBER: JP 2001-39196
; PRIOR FILING DATE: 2001-02-15
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 489
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: HRC12337-Fc fusion protein
US-10-468-333-7

Query Match      100.0%; Score 1263; DB 15; Length 489;
Best Local Similarity 100.0%; Pred. No. 2.5e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCTCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 258 EPKSCDKHTCTCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 317
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 318 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 377
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 378 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 437
QY 181 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232
DB 438 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 489
```

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RESULT 123
US-10-207-655-344
; Sequence 344, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069.401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; CURRENT FILING DATE: 2002-07-25
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 344
; LENGTH: 492
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
US-10-207-655-344

Query Match      100.0%; Score 1263; DB 14; Length 492;
Best Local Similarity 100.0%; Pred. No. 2.5e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCTCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 261 EPKSCDKHTCTCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 320
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB 321 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 380
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB 381 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 440
QY 181 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232
DB 441 PVLDSGGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 492

RESULT 124
US-10-683-255-6
; Sequence 6, Application US/10683255
; Publication No. US20040063910A1
; GENERAL INFORMATION:
; APPLICANT: Kavanaugh, William M.
; APPLICANT: Ballinger, Marcus
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
; FILE REFERENCE: PP01474.101
; CURRENT APPLICATION NUMBER: US/10/683,255
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 09/499,846
; PRIOR FILING DATE: 2000-02-07
; PRIOR APPLICATION NUMBER: 60/119,002
; PRIOR FILING DATE: 1999-02-08
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 497
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-683-255-6

Query Match      100.0%; Score 1263; DB 15; Length 497;
Best Local Similarity 100.0%; Pred. No. 2.5e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCTCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60
DB 266 EPKSCDKHTCTCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 325
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; PRIOR APPLICATION NUMBER: 60/233,305  
; PRIOR FILING DATE: 2000-09-15  
; NUMBER OF SEQ ID NOS: 42  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 40  
; LENGTH: 547  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-951-268-40

Query Match 100.0%; Score 1263; DB 9; Length 547;  
Best Local Similarity 100.0%; Pred. No. 2.8e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 316 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 375  
  
QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 120  
DB 376 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 435  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 436 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 495  
  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 232  
DB 496 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 547

## RESULT 135

US-09-745-792A-54  
; Sequence 54, Application US/09745792A  
; Publication No. US2005003475A1  
; GENERAL INFORMATION:  
; APPLICANT: Foster, Donald C.  
; APPLICANT: Xu, Wenfeng  
; APPLICANT: Madden, Karen L.  
; APPLICANT: Kelly, James D.  
; APPLICANT: Sprecher, Cindy A.  
; APPLICANT: Brandt, Cameron S.  
; APPLICANT: Rixon, Mark W.  
; APPLICANT: Presnell, Scott R.  
; APPLICANT: Fox, Brian A.  
; TITLE OF INVENTION: Soluble Interleukin-20 Receptor  
; FILE REFERENCE: 99-107  
; CURRENT APPLICATION NUMBER: US/09/745,792A  
; CURRENT FILING DATE: 2000-12-22  
; PRIOR APPLICATION NUMBER: 60/171,966  
; PRIOR FILING DATE: 1999-12-23  
; PRIOR APPLICATION NUMBER: 60/213,416  
; PRIOR FILING DATE: 2000-06-22  
; NUMBER OF SEQ ID NOS: 72  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 54  
; LENGTH: 547  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-745-792A-54

Query Match 100.0%; Score 1263; DB 11; Length 547;  
Best Local Similarity 100.0%; Pred. No. 2.8e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 316 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 375  
  
QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 120  
DB 376 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 435

QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 436 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 495  
  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 232  
DB 496 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 547

## RESULT 136

US-10-424-658-54  
; Sequence 54, Application US/10424658  
; Publication No. US20040005320A1  
; GENERAL INFORMATION:  
; APPLICANT: Thompson, Penny  
; APPLICANT: Foster, Donald C.  
; APPLICANT: Xu, Wenfeng  
; APPLICANT: Blumberg, Hal  
; APPLICANT: Chandrasekhar, Yasmin A.  
; TITLE OF INVENTION: Method for Treating Inflammation  
; FILE REFERENCE: 99-108D1  
; CURRENT APPLICATION NUMBER: US/10/424,658  
; CURRENT FILING DATE: 2003-04-28  
; PRIOR APPLICATION NUMBER: 60/171,969  
; PRIOR FILING DATE: 1999-12-23  
; PRIOR APPLICATION NUMBER: 60/213,341  
; PRIOR FILING DATE: 2000-06-22  
; PRIOR APPLICATION NUMBER: 09/746,359  
; PRIOR FILING DATE: 2000-12-22  
; NUMBER OF SEQ ID NOS: 72  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 54  
; LENGTH: 547  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-424-658-54

Query Match 100.0%; Score 1263; DB 15; Length 547;  
Best Local Similarity 100.0%; Pred. No. 2.8e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 316 EPKSCDKTHTCPAPPELLGGPSVFLFPPPKDTLMISRTPEVTCVVDVSHEDPEVKF 375  
  
QY 61 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 120  
DB 376 NWTVDGVEVHNATKPREEQYNSTYRVSVLTVLHODWLNKGYCKVSNKALPAPIEKT 435  
  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
DB 436 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 495  
  
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 232  
DB 496 PVLDSGSPFLYSKLTVDKSRWQQGNVFCSCVMHEALHNYTKQSLSLSPGK 547

## RESULT 137

US-09-773-877A-14  
; Sequence 14, Application US/09773877A  
; Publication No. US2003001797A1  
; GENERAL INFORMATION:  
; APPLICANT: Xia, Yu-ping et al.  
; TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES  
; FILE REFERENCE: REG 710b  
; CURRENT APPLICATION NUMBER: US/09/773,877A  
; CURRENT FILING DATE: 2001-01-31  
; NUMBER OF SEQ ID NOS: 27  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 14  
; LENGTH: 557  
; TYPE: PRT

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; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Flt(1-3 deltaB)-Fc (Mut1)
US-09-773-877A-14

Query Match      100.0%; Score 1263; DB 10; Length 557;
Best Local Similarity 100.0%; Pred. No. 2.9e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 326 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 385
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 386 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 445
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 446 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 505
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTQKSLSLSPGK 232
Db 506 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTQKSLSLSPGK 557

RESULT 138
US-10-471-151-31
; Sequence 31, Application US/10471151
; Publication No. US20040086908A1
; GENERAL INFORMATION:
; APPLICANT: Chandrasekher, Yasmin A.
; APPLICANT: Novak, Julia E.
; APPLICANT: Foster, Donald C.
; APPLICANT: Wenfeng, Xu
; TITLE OF INVENTION: Soluble Heterodimeric Cytokine Receptor
; FILE REFERENCE: 01-10PC
; CURRENT APPLICATION NUMBER: US/10/471,151
; CURRENT FILING DATE: 2003-09-08
; PRIOR APPLICATION NUMBER: 60/274,560
; PRIOR FILING DATE: 2001-03-09
; PRIOR APPLICATION NUMBER: 60/299,865
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 40
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 31
; LENGTH: 558
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-471-151-31

Query Match      100.0%; Score 1263; DB 15; Length 558;
Best Local Similarity 100.0%; Pred. No. 2.9e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 327 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 386
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 387 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 446
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 447 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 506
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTQKSLSLSPGK 232
Db 507 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTQKSLSLSPGK 558
```

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RESULT 139
US-09-825-561A-16
; Sequence 16, Application US/09825561A
; Patent No. US20020137677A1
; GENERAL INFORMATION:
; APPLICANT: Sprecher, Cindy A.
; APPLICANT: No. US20020137677A1ak, Julia E.
; APPLICANT: West, James W.
; APPLICANT: Presnell, Scott R.
; APPLICANT: Holly, Richard D.
; APPLICANT: Nelson, Andrew J.
; TITLE OF INVENTION: SOLUBLE ZALPHA11 CYTOKINE RECEPTORS
; FILE REFERENCE: 00-22
; CURRENT APPLICATION NUMBER: US/09/825,561A
; CURRENT FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/194,731
; PRIOR FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/222,121
; PRIOR FILING DATE: 2000-07-28
; NUMBER OF SEQ ID NOS: 86
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 567
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: soluble zalphal1R/IgGammal polypeptide
US-09-825-561A-16

Query Match      100.0%; Score 1263; DB 9; Length 567;
Best Local Similarity 100.0%; Pred. No. 2.9e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 336 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 395
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 396 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 455
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 456 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 515
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTQKSLSLSPGK 232
Db 516 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTQKSLSLSPGK 567
```

```
RESULT 140
US-09-773-877A-12
; Sequence 12, Application US/09773877A
; Publication No. US20030017977A1
; GENERAL INFORMATION:
; APPLICANT: Xia, Yu-Ping et al.
; TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
; FILE REFERENCE: REG 710B
; CURRENT APPLICATION NUMBER: US/09/773,877A
; CURRENT FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 12
; LENGTH: 567
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Flt(1-3)-Fc
US-09-773-877A-12

Query Match      100.0%; Score 1263; DB 10; Length 567;
Best Local Similarity 100.0%; Pred. No. 2.9e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 460 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 519  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSQVSCVMHEALHNHYTQKSLSLSPGK 232  
Db 520 PVLDSGSGFFLYSKLTVDKSRWQGNVFSQVSCVMHEALHNHYTQKSLSLSPGK 571

## RESULT 144

US-09-745-792A-53  
; Sequence 53, Application US/09745792A  
; Publication No. US20050003475A1  
; GENERAL INFORMATION:  
; APPLICANT: Foster, Donald C.  
; APPLICANT: Xu, Wenfeng  
; APPLICANT: Madden, Karen L.  
; APPLICANT: Kelly, James D.  
; APPLICANT: Sprecher, Cindy A.  
; APPLICANT: Brandt, Cameron S.  
; APPLICANT: Rixon, Mark W.  
; APPLICANT: Presnell, Scott R.  
; APPLICANT: Fox, Brian A.  
; TITLE OF INVENTION: Soluble Interleukin-20 Receptor  
; FILE REFERENCE: 99-107  
; CURRENT APPLICATION NUMBER: US/09/745,792A  
; CURRENT FILING DATE: 2000-12-22  
; PRIOR APPLICATION NUMBER: 60/171,966  
; PRIOR FILING DATE: 1999-12-23  
; PRIOR APPLICATION NUMBER: 60/213,416  
; PRIOR FILING DATE: 2000-06-22  
; NUMBER OF SEQ ID NOS: 72  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 53  
; LENGTH: 571  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-745-792A-53

Query Match 100.0%; Score 1263; DB 11; Length 571;  
Best Local Similarity 100.0%; Pred. No. 3e-92; Indels 0; Gaps 0;  
Matches 232; Conservative 0; Mismatches 0;  
QY 1 EPKSCDKHTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 340 EPKSCDKHTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKF 399  
QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 400 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 459  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 460 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 519  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSQVSCVMHEALHNHYTQKSLSLSPGK 232  
Db 520 PVLDSGSGFFLYSKLTVDKSRWQGNVFSQVSCVMHEALHNHYTQKSLSLSPGK 571

## RESULT 145

US-10-424-658-53  
; Sequence 53, Application US/10424658  
; Publication No. US20040005320A1  
; GENERAL INFORMATION:  
; APPLICANT: Thompson, Penny  
; APPLICANT: Foster, Donald C.  
; APPLICANT: Xu, Wenfeng  
; APPLICANT: Blumberg, Hal  
; APPLICANT: Chandrasekhar, Yasmin A.  
; TITLE OF INVENTION: Method for Treating Inflammation  
; FILE REFERENCE: 99-108D1  
; CURRENT APPLICATION NUMBER: US/10/424,658  
; CURRENT FILING DATE: 2003-04-28

; PRIOR APPLICATION NUMBER: 60/171,969  
; PRIOR FILING DATE: 1999-12-23  
; PRIOR APPLICATION NUMBER: 60/213,341  
; PRIOR FILING DATE: 2000-06-22  
; PRIOR APPLICATION NUMBER: 09/ 746,359  
; PRIOR FILING DATE: 2000-12-22  
; NUMBER OF SEQ ID NOS: 72  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 53  
; LENGTH: 571  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-424-658-53

Query Match 100.0%; Score 1263; DB 15; Length 571;  
Best Local Similarity 100.0%; Pred. No. 3e-92; Indels 0; Gaps 0;  
Matches 232; Conservative 0; Mismatches 0;  
QY 1 EPKSCDKHTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 340 EPKSCDKHTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKF 399  
QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 400 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 459  
QY 121 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 460 ISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 519  
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSQVSCVMHEALHNHYTQKSLSLSPGK 232  
Db 520 PVLDSGSGFFLYSKLTVDKSRWQGNVFSQVSCVMHEALHNHYTQKSLSLSPGK 571

## RESULT 146

US-09-886-404-22  
; Sequence 22, Application US/09886404  
; Patent No. US20020037524A1  
; GENERAL INFORMATION:  
; APPLICANT: Medlock, Eugene  
; APPLICANT: Yeh, Richard  
; APPLICANT: Silbiger, Scott M.  
; APPLICANT: Elliot, Gary S.  
; APPLICANT: Nguyen, Hung O.  
; APPLICANT: Jing, Shujian  
; TITLE OF INVENTION: IL-17 Like Molecules and Uses Thereof  
; FILE REFERENCE: 01017/37128B  
; CURRENT APPLICATION NUMBER: US/09/886,404  
; CURRENT FILING DATE: 2001-06-21  
; PRIOR APPLICATION NUMBER: 09/810,384  
; PRIOR FILING DATE: 2001-03-16  
; PRIOR APPLICATION NUMBER: 60/266,159  
; PRIOR FILING DATE: 2001-02-02  
; PRIOR APPLICATION NUMBER: 60/213,125  
; PRIOR FILING DATE: 2000-06-22  
; NUMBER OF SEQ ID NOS: 22  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 22  
; LENGTH: 585  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-886-404-22

Query Match 100.0%; Score 1263; DB 9; Length 585;  
Best Local Similarity 100.0%; Pred. No. 3e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKHTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 354 EPKSCDKHTHTCPPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKF 413  
QY 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Db 414 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDMLNGKEYCKVSNKALPAPIEKT 473  
QY 121 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 474 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 533  
QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTQKSLSPGK 232  
Db 534 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTQKSLSPGK 585

RESULT 147

US-10-037-591A-22  
; Sequence 22, Application US/10037591A  
; Publication No. US20030124092A1  
; GENERAL INFORMATION:  
; APPLICANT: Medlock, Eugene  
; APPLICANT: Yeh, Richard  
; APPLICANT: Silbiger, Scott M.  
; APPLICANT: Elliot, Gary S.  
; APPLICANT: Nguyen, Hung Q.  
; APPLICANT: Jing, Shugian  
; TITLE OF INVENTION: IL-17 Like Molecules and Uses Thereof  
; FILE REFERENCE: 01017/37128C  
; CURRENT FILING DATE: 2002-06-24  
; PRIOR APPLICATION NUMBER: 09/886,404  
; PRIOR FILING DATE: 2001-06-21  
; PRIOR APPLICATION NUMBER: 09/810,384  
; PRIOR FILING DATE: 2001-03-16  
; PRIOR APPLICATION NUMBER: 60/266,159  
; PRIOR FILING DATE: 2001-02-02  
; PRIOR APPLICATION NUMBER: 60/213,125  
; PRIOR FILING DATE: 2000-06-22  
; NUMBER OF SEQ ID NOS: 24  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 22  
; LENGTH: 585  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-037-591A-22

Query Match 100.0%; Score 1263; DB 14; Length 585;  
Best Local Similarity 100.0%; Pred. No. 3e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 354 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 413  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDMLNGKEYCKVSNKALPAPIEKT 120  
Db 414 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDMLNGKEYCKVSNKALPAPIEKT 473  
QY 121 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 474 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 533  
QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTQKSLSPGK 232  
Db 534 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTQKSLSPGK 585

RESULT 148

US-10-846-352-22  
; Sequence 22, Application US/10846352  
; Publication No. US20050003451A1  
; GENERAL INFORMATION:  
; APPLICANT: Medlock, Eugene  
; APPLICANT: Yeh, Richard  
; APPLICANT: Silbiger, Scott M.  
; APPLICANT: Elliot, Gary S.

; APPLICANT: Nguyen, Hung Q.  
; APPLICANT: Jing, Shugian  
; TITLE OF INVENTION: IL 17 Like Molecules and Uses Thereof  
; FILE REFERENCE: 01017/37128D  
; CURRENT APPLICATION NUMBER: US/10/846,352  
; CURRENT FILING DATE: 2004-05-13  
; PRIOR APPLICATION NUMBER: 10/037,591  
; PRIOR FILING DATE: 2001-12-21  
; PRIOR APPLICATION NUMBER: 09/886,404  
; PRIOR FILING DATE: 2001-06-21  
; PRIOR APPLICATION NUMBER: 09/810,384  
; PRIOR FILING DATE: 2001-03-16  
; PRIOR APPLICATION NUMBER: 60/266,159  
; PRIOR FILING DATE: 2001-02-02  
; PRIOR APPLICATION NUMBER: 60/213,125  
; PRIOR FILING DATE: 2000-06-22  
; NUMBER OF SEQ ID NOS: 24  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 22  
; LENGTH: 585  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-846-352-22

Query Match 100.0%; Score 1263; DB 16; Length 585;  
Best Local Similarity 100.0%; Pred. No. 3e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
Db 354 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 413  
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDMLNGKEYCKVSNKALPAPIEKT 120  
Db 414 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDMLNGKEYCKVSNKALPAPIEKT 473  
QY 121 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180  
Db 474 ISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 533  
QY 181 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTQKSLSPGK 232  
Db 534 PVLDSGSPFLYSKLTVDKSRWQGNVFCSCVMHEALHNYHTQKSLSPGK 585

RESULT 149

US-09-313-942-8  
; Sequence 8, Application US/09313942  
; Publication No. US20020012962A1  
; GENERAL INFORMATION:  
; APPLICANT: REGENERON PHARMACEUTICALS, INC.  
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING  
; FILE REFERENCE: REG 203-A  
; CURRENT APPLICATION NUMBER: US/09/313,942  
; CURRENT FILING DATE: 1999-05-19  
; PRIOR APPLICATION NUMBER: 09/313,942  
; PRIOR FILING DATE: 1999-05-19  
; PRIOR APPLICATION NUMBER: 60/101,858  
; PRIOR FILING DATE: 1998-09-25  
; NUMBER OF SEQ ID NOS: 32  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 8  
; LENGTH: 592  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-313-942-8

Query Match 100.0%; Score 1263; DB 9; Length 592;  
Best Local Similarity 100.0%; Pred. No. 3.1e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKKDTLMISRTPEVTCVVDVSHEDPEVKF 60

```
|||||
Db 361 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 420
QY 61 NWYVDGVEVHNAKTKRREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 421 NWYVDGVEVHNAKTKRREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 480
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 481 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 540
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232
Db 541 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 592

RESULT 150
US-09-935-868-8
; Sequence 8, Application US/09935868
; Patent No. US20020164690A1
; GENERAL INFORMATION:
; APPLICANT: Regeneron Pharmaceuticals, Inc
; TITLE OF INVENTION: Receptor Based Antagonists, and Methods of Making and Using
; FILE REFERENCE: REG 203D
; CURRENT APPLICATION NUMBER: US/09/935,868
; PRIOR FILING DATE: 2002-04-11
; PRIOR APPLICATION NUMBER: PCT/US99/22045
; PRIOR FILING DATE: 1999-09-22
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 8
; LENGTH: 592
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-935-868-8

Query Match 100.0%; Score 1263; DB 9; Length 592;
Best Local Similarity 100.0%; Pred. No. 3.1e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 361 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 420
QY 61 NWYVDGVEVHNAKTKRREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 421 NWYVDGVEVHNAKTKRREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 480
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 481 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 540
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232
Db 541 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 592

RESULT 151
US-10-287-035-8
; Sequence 8, Application US/10287035
; Publication No. US20030104567A1
; GENERAL INFORMATION:
; APPLICANT: Neil Stahl and George D. Yancopoulos
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
; FILE REFERENCE: REG 203DA
; CURRENT APPLICATION NUMBER: US/10/287,035
; CURRENT FILING DATE: 2002-11-01
; PRIOR APPLICATION NUMBER: USSN 09/935,868
; PRIOR FILING DATE: 2001-08-23
; PRIOR APPLICATION NUMBER: USSN 09/787,835
; PRIOR FILING DATE: 2001-03-22
; PRIOR APPLICATION NUMBER: USSN 09/313,942
```

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; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 09/313,942
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 60/101,858
; PRIOR FILING DATE: 1998-09-25
; NUMBER OF SEQ ID NOS: 60
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 592
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-287-035-8

Query Match 100.0%; Score 1263; DB 14; Length 592;
Best Local Similarity 100.0%; Pred. No. 3.1e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 361 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 420
QY 61 NWYVDGVEVHNAKTKRREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 421 NWYVDGVEVHNAKTKRREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 480
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 481 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 540
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232
Db 541 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 592

RESULT 152
US-10-282-162-8
; Sequence 8, Application US/10282162
; Publication No. US20030143697A1
; GENERAL INFORMATION:
; APPLICANT: REGENERON PHARMACEUTICALS, INC.
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
; FILE REFERENCE: REG 203-B-US
; CURRENT APPLICATION NUMBER: US/10/282,162
; CURRENT FILING DATE: 2002-10-28
; PRIOR APPLICATION NUMBER: 09/787,835
; PRIOR FILING DATE: 1999-09-22
; PRIOR APPLICATION NUMBER: PCT/US99/22045
; PRIOR FILING DATE: 1999-09-22
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 592
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-282-162-8

Query Match 100.0%; Score 1263; DB 14; Length 592;
Best Local Similarity 100.0%; Pred. No. 3.1e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 361 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 420
QY 61 NWYVDGVEVHNAKTKRREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 421 NWYVDGVEVHNAKTKRREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 480
QY 121 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 481 ISKAKGQPREPOVYITLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 540
```

<b>Qy</b>	181	PVLSDGSGFFLYSKLTVDKSRWQQGVFSCVMHEALHNHYTQKSLSLSPGK	232
<b>Db</b>	541	PVLSDGSGFFLYSKLTVDKSRWQQGVFSCVMHEALHNHYTQKSLSLSPGK	592

**RESULT 153**

```

US-10-334-235-38
; Sequence 38, Application US/10334235
; Publication No. US20040131591A1
; GENERAL INFORMATION:
; APPLICANT: Oxford Biomedica (UK) Ltd.
; APPLICANT: Kingsman, Alan
; APPLICANT: Bebbington, Christopher
; APPLICANT: Carroll, Miles
; APPLICANT: Eliard, Fiona
; APPLICANT: Kingsman, Susan
; APPLICANT: Myers, Kevin
; APPLICANT: Lamikandra, Abigail
; TITLE OF INVENTION: VECTOR SYSTEM
; FILE REFERENCE: 532682000920
; CURRENT APPLICATION NUMBER: US/10/334, 235
; CURRENT FILING DATE: 2002-12-30
; PRIOR APPLICATION NUMBER: US 10/060,585
; PRIOR FILING DATE: 2002-01-29
; PRIOR APPLICATION NUMBER: PCT/GB00/04317
; PRIOR FILING DATE: 2000-11-13
; PRIOR APPLICATION NUMBER: US 09/445,375
; PRIOR FILING DATE: 1998-06-04
; NUMBER OF SEQ ID NOS: 40
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 38
; LENGTH: 600
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: peptide of 574Saab1
US-10-334-235-38

```

Query Match	100.0%	Score 1263;	DB 16;	Length 600;
Best Local Similarity	100.0%	Pred. No. 3.1e-92;		
Matches 232;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	EPKSCDTHTCPPCPAPELLGGPSVFLLPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF	60	
Db	364	EPKSCDTHTCPPCPAPELLGGPSVFLLPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF	423	
Qy	61	NWYVDGVEVHNAAKTPKEEQVNSTYRVVSVLTTLVHQDWLNGKEYCKCKVSNKALPAPIEKT	120	
Db	424	NWYVDGVEVHNAAKTPKEEQVNSTYRVVSVLTTLVHQDWLNGKEYCKCKVSNKALPAPIEKT	483	
Qy	121	ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP	180	
Db	484	ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP	543	
Qy	181	PVLDSGDSFFLYSKLTVDKSRWQQGNVPCSWMEALHNHYTKQSLSLSPCK	232	
Db	544	PVLDSGDSFFLYSKLTVDKSRWQQGNVPCSWMEALHNHYTKQSLSLSPCK	595	

RESIT.T 154

```

RESUL1 134
US-10-363-427-10
; Sequence 10, Application US/10363427
; Publication No. US20030195338A1
; GENERAL INFORMATION:
; APPLICANT: MedexGen Inc..
; APPLICANT: CHUNG, Yong Hoon
; APPLICANT: HAN, Ji Woong
; APPLICANT: LEE, Hye Ja
; APPLICANT: CHOI, Eun Yong
; APPLICANT: KIM, Jin Mi
; APPLICANT: YIM, Soo Bin
; TITLE OF INVENTION: Concatameric Immunoadhesion
; FILE REFERENCE:

```

```

; CURRENT APPLICATION NUMBER: US10/363,427
; CURRENT FILING DATE: 2003-02-28
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Kopatentin 1.71
; SEQ ID NO 10
; LENGTH: 608
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-363-427-10

```

Query Match	100.0%	Score 1263	DB 14	Length 608
Best Local Similarity	100.0%	Pred. NO. 3.2e-52		
Matches 232	Conservative 0	Mismatches 0	Indels 0	Gaps 0
Qy	1	EPKSCDKTHTCPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKF	60	
Db	377	EPKSCDKTHTCPCPAPPELLGGPSVFLFPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKF	436	
Qy	61	NWYVDGVEVHNATKTPREEQVNSYRVSVLTVLHODWLNCKEYCKVSNKALPAPIEKT	120	
Db	437	NWYVDGVEVHNATKTPREEQVNSYRVSVLTVLHODWLNCKEYCKVSNKALPAPIEKT	496	
Qy	121	ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP	180	
Db	497	ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP	556	
Qy	181	PVLDSGDSFFLYSKLTVDKRWQGNVFCSSVMHEALHNHYTQKSLSLSPGK	232	
Db	557	PVLDSGDSFFLYSKLTVDKRWQGNVFCSSVMHEALHNHYTQKSLSLSPGK	608	

RESULT 155

```

US-10-683-255-2
; Sequence 2, Application US/10683255
; Publication NO. US20040063910A1
; GENERAL INFORMATION:
; APPLICANT: Kavanaugh, William M.
; APPLICANT: Ballinger, Marcus
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
; FILE REFERENCE: PP01474.101
; CURRENT APPLICATION NUMBER: US/10/683,255
; CURRENT FILING DATE: 2003-10-10
; PRIORITY APPLICATION NUMBER: 09/499,846
; PRIORITY FILING DATE: 2000-02-07
; PRIORITY APPLICATION NUMBER: 60/119,002
; PRIORITY FILING DATE: 1999-02-08
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 622
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-683-255-2

```

Query March	100.0%;	Score 1263;	DB 15;	Length 632;
Best Local Similarity	100.0%;	Pred. No. 3.3e-92;		
Matches 232;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0
Qy	1	EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF	60	
Db	391	EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKDPTLMISRTPEVTCVVVDVSHEDPEVKF	450	
Qy	61	NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTTLHQDWLNGKEYCKVCKSNKALPAPIEKT	120	
Db	451	NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTTLHQDWLNGKEYCKVCKSNKALPAPIEKT	510	
Qy	121	ISKAGQPREPQVNTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP	180	
Db	511	ISKAGQPREPQVNTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP	570	
Qy	181	PVLDSGDSGFFLYSKLTVDKSRWQQGNVPCSWMEALHNHYTQKSLSLSPGK	232	

Db 571 PVLSDSGSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKSLSLSPGK 622

## RESULT 156

US-10-617-619-8  
; Sequence 8, Application US/10617619  
; Publication No. US20040110929A1  
; GENERAL INFORMATION:  
; APPLICANT: Bjorn, Soren E  
; APPLICANT: Nicolaissen, Else M  
; APPLICANT: Jorgensen, Anker S  
; TITLE OF INVENTION: TF Binding Compound  
; FILE REFERENCE: 6455.200-US  
; CURRENT APPLICATION NUMBER: US/10/617,619  
; CURRENT FILING DATE: 2003-07-11  
; PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099  
; PRIOR FILING DATE: 2002-07-12  
; PRIOR APPLICATION NUMBER: US 60/404,568  
; PRIOR FILING DATE: 2002-08-19  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 8  
; LENGTH: 641  
; TYPE: PRT  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: Synthetic  
; NAME/KEY: misc feature  
; LOCATION: (6)..(7)  
; OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
; FEATURE:  
; NAME/KEY: misc feature  
; LOCATION: (14)..(14)  
; OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
; FEATURE:  
; NAME/KEY: misc feature  
; LOCATION: (16)..(16)  
; OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
; FEATURE:  
; NAME/KEY: misc feature  
; LOCATION: (19)..(20)  
; OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
; FEATURE:  
; NAME/KEY: misc feature  
; LOCATION: (25)..(26)  
; OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
; FEATURE:  
; NAME/KEY: misc feature  
; LOCATION: (29)..(29)  
; OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
; FEATURE:  
; NAME/KEY: misc feature  
; LOCATION: (35)..(35)  
; OTHER INFORMATION: Xaa can be any naturally occurring amino acid

US-10-617-619-8  
Query Match 100.0%; Score 1263; DB 16; Length 641;  
Best Local Similarity 100.0%; Pred. No. 3.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKHTCCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 410 EPKSCDKHTCCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 469  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 470 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 529  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 530 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 589

US-10-617-619-8  
Query Match 100.0%; Score 1263; DB 16; Length 641;  
Best Local Similarity 100.0%; Pred. No. 3.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTCCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 410 EPKSCDKHTCCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 469  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 470 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 529  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 530 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 589

QY 181 PVLSDSGSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKSLSLSPGK 232  
DB 590 PVLSDSGSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKSLSLSPGK 641

## RESULT 157

US-10-363-427-12  
; Sequence 12, Application US/10363427  
; Publication No. US20030195338A1  
; GENERAL INFORMATION:  
; APPLICANT: Medexgen Inc.  
; APPLICANT: CHUNG, Yong Hoon  
; APPLICANT: HAN, Ji Woong  
; APPLICANT: LEE, Hye Ja  
; APPLICANT: CHOI, Eun Yong  
; APPLICANT: KIM, Jin Mi  
; APPLICANT: YIM, Soo Bin  
; TITLE OF INVENTION: Concatametric Immunoaddhesion  
; FILE REFERENCE:  
; CURRENT APPLICATION NUMBER: US/10/363,427  
; CURRENT FILING DATE: 2003-02-28  
; NUMBER OF SEQ ID NOS: 52  
; SOFTWARE: KopatentIn 1.71  
; SEQ ID NO 12  
; LENGTH: 659  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; US-10-363-427-12

Query Match 100.0%; Score 1263; DB 14; Length 659;  
Best Local Similarity 100.0%; Pred. No. 3.5e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKHTCCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
DB 428 EPKSCDKHTCCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 487  
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 488 NWYVDGVEVHNAKTPREEQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 547  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 180  
DB 548 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP 607  
QY 181 PVLSDSGSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKSLSLSPGK 232  
DB 608 PVLSDSGSFLLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKSLSLSPGK 659

## RESULT 158

US-10-617-619-11  
; Sequence 11, Application US/10617619  
; Publication No. US20040110929A1  
; GENERAL INFORMATION:  
; APPLICANT: Bjorn, Soren E  
; APPLICANT: Nicolaissen, Else M  
; APPLICANT: Jorgensen, Anker S  
; TITLE OF INVENTION: TF Binding Compound  
; FILE REFERENCE: 6455.200-US  
; CURRENT APPLICATION NUMBER: US/10/617,619  
; CURRENT FILING DATE: 2003-07-11  
; PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099  
; PRIOR FILING DATE: 2002-07-12  
; PRIOR APPLICATION NUMBER: US 60/404,568  
; PRIOR FILING DATE: 2002-08-19  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 11  
; LENGTH: 679  
; TYPE: PRT  
; ORGANISM: Artificial  
; FEATURE:

OTHER INFORMATION: Synthetic  
US-10-617-619-11

Query Match 100.0%; Score 1263; DB 16; Length 679;  
Best Local Similarity 100.0%; Pred. No. 3.6e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 448 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 507  
QY 61 NWYVDGVEVHNKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 508 NWYVDGVEVHNKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 567  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 180  
DB 568 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 627  
QY 181 PVLDSDGSFPLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232  
DB 628 PVLDSDGSFPLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 679

## RESULT 159

US-09-875-338-9  
Sequence 9, Application US/09875338  
Patent No. US20020095024A1  
GENERAL INFORMATION:  
APPLICANT: MIKESELL, GLEN E.  
APPLICANT: CHANG, HAN  
APPLICANT: FINGER, JOSHUA N.  
APPLICANT: YANG, GUCHEN  
APPLICANT: LU, PIN  
APPLICANT: ZHOU, XIA-DI  
APPLICANT: PEACH, ROBERT  
TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
TITLE OF INVENTION: IMMUNOMODULATION  
FILE REFERENCE: 3053-4071US2  
CURRENT APPLICATION NUMBER: US/09/875,338  
CURRENT FILING DATE: 2001-06-06  
PRIOR APPLICATION NUMBER: 60/272,107  
PRIOR FILING DATE: 2001-02-28  
PRIOR APPLICATION NUMBER: 60/209,811  
PRIOR FILING DATE: 2000-06-06  
NUMBER OF SEQ ID NOS: 94  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 9  
LENGTH: 698  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-09-875-338-9

Query Match 100.0%; Score 1263; DB 9; Length 698;  
Best Local Similarity 100.0%; Pred. No. 3.7e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 467 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 526  
QY 61 NWYVDGVEVHNKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 527 NWYVDGVEVHNKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 586  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 180  
DB 587 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 646  
QY 181 PVLDSDGSFPLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232

DB 647 PVLDSDGSFPLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 698

## RESULT 160

US-10-077-023-9  
Sequence 9, Application US/10077023  
Publication No. US20030031675A1  
GENERAL INFORMATION:  
APPLICANT: MIKESELL, GLEN E.  
APPLICANT: CHANG, HAN  
APPLICANT: FINGER, JOSHUA N.  
APPLICANT: YANG, GUCHEN  
APPLICANT: LU, PIN  
APPLICANT: ZHOU, XIA-DI  
APPLICANT: PEACH, ROBERT  
TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR  
TITLE OF INVENTION: IMMUNOMODULATION  
FILE REFERENCE: 3053-4071US3  
CURRENT APPLICATION NUMBER: US/10/077,023  
CURRENT FILING DATE: 2002-02-15  
PRIOR APPLICATION NUMBER: 60/272,107  
PRIOR FILING DATE: 2001-02-28  
PRIOR APPLICATION NUMBER: 60/209,811  
PRIOR FILING DATE: 2000-06-06  
NUMBER OF SEQ ID NOS: 138  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 9  
LENGTH: 698  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-10-077-023-9

Query Match 100.0%; Score 1263; DB 14; Length 698;  
Best Local Similarity 100.0%; Pred. No. 3.7e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
DB 467 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 526  
QY 61 NWYVDGVEVHNKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
DB 527 NWYVDGVEVHNKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 586  
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 180  
DB 587 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT 646  
QY 181 PVLDSDGSFPLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232  
DB 647 PVLDSDGSFPLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 698

## RESULT 161

US-10-617-619-6  
Sequence 6, Application US/10617619  
Publication No. US20040110929A1  
GENERAL INFORMATION:  
APPLICANT: Bjorn, Soren E  
APPLICANT: Nicolaissen, Else M  
APPLICANT: Jorgensen, Anker S  
TITLE OF INVENTION: TF Binding Compound  
FILE REFERENCE: 6455.200-US  
CURRENT APPLICATION NUMBER: US/10/617,619  
CURRENT FILING DATE: 2003-07-11  
PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099  
PRIOR FILING DATE: 2002-07-12  
PRIOR APPLICATION NUMBER: US 60/404,568  
PRIOR FILING DATE: 2002-08-19

```
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 6
; LENGTH: 701
; TYPE: PRT
; ORGANISM: Human
; US-10-617-619-6

Query Match          100.0%; Score 1263; DB 16; Length 701;
Best Local Similarity 100.0%; Pred. No. 3.8e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 470 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 529
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
Db 530 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 589
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 590 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 649
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232
Db 650 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 701
```

```
RESULT 162
US-10-679-620-64
; Sequence 64, Application US/10679620
; Publication No. US20040110930A1
; GENERAL INFORMATION:
; APPLICANT: Large Scale Biology
; APPLICANT: Reinl, Stephen J.
; APPLICANT: Edwards, Patricia C.
; TITLE OF INVENTION: MULTIMERIC PROTEIN ENGINEERING
; CURRENT APPLICATION NUMBER: US/10/679,620
; CURRENT FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/415,940
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 122
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 64
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: p9E10chimericv2-1, see Example 15
; US-10-679-620-64

Query Match          100.0%; Score 1263; DB 16; Length 713;
Best Local Similarity 100.0%; Pred. No. 3.8e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 482 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 541
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
Db 542 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 601
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 602 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 661
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232
Db 662 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 713
```

```
RESULT 163
US-10-679-620-62
; Sequence 62, Application US/10679620
; Publication No. US20040110930A1
; GENERAL INFORMATION:
; APPLICANT: Large Scale Biology
; APPLICANT: Reinl, Stephen J.
; APPLICANT: Edwards, Patricia C.
; TITLE OF INVENTION: MULTIMERIC PROTEIN ENGINEERING
; FILE REFERENCE: 34150-004A
; CURRENT APPLICATION NUMBER: US/10/679,620
; CURRENT FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/415,940
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 122
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 62
; LENGTH: 715
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: p9E10chimericv1-1, see Example 15
; US-10-679-620-62

Query Match          100.0%; Score 1263; DB 16; Length 715;
Best Local Similarity 100.0%; Pred. No. 3.9e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60
Db 484 EPKSCDKHTHTCCPPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 543
QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
Db 544 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 603
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
Db 604 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 663
QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 232
Db 664 PVLDSGSGFFLYSKLTVDKSRWQGNVFSCVMEALHNHYTQKSLSLSPGK 715
```

```
RESULT 164
US-09-825-012-46
; Sequence 46, Application US/09825012
; Patent No. US20020122798A1
; GENERAL INFORMATION:
; APPLICANT: Young, Robert
; TITLE OF INVENTION: Compounds for Targeting
; FILE REFERENCE: 43191-256808
; CURRENT APPLICATION NUMBER: US/09/825,012
; CURRENT FILING DATE: 2001-04-03
; PRIOR APPLICATION NUMBER: US 60/237,159
; PRIOR FILING DATE: 2000-10-02
; PRIOR APPLICATION NUMBER: GB 0008049.9
; PRIOR FILING DATE: 2000-04-03
; NUMBER OF SEQ ID NOS: 102
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 46
; LENGTH: 731
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Humanised HMPG1 heavy chain - DNase I fusion
; US-09-825-012-46

Query Match          100.0%; Score 1263; DB 9; Length 731;
Best Local Similarity 100.0%; Pred. No. 4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 EPKSCDKTHTCCPPCAPPELLGGPSVFLPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 236 EPKSCDKTHTCCPPCAPPELLGGPSVFLPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 295
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
DB 296 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 355
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVNESGQPENNYKTP 180
DB 356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVNESGQPENNYKTP 415
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSNVMEALHNNHYTQKLSLSGPK 232
DB 416 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSNVMEALHNNHYTQKLSLSGPK 467

RESULT 165
US-09-825-012-55
; Sequence 55, Application US/09825012
; Patent No. US20020122798A1
; GENERAL INFORMATION:
; APPLICANT: Young, Robert
; TITLE OF INVENTION: Compounds for Targeting
; FILE REFERENCE: 43191-256808
; CURRENT APPLICATION NUMBER: US/09/825,012
; CURRENT FILING DATE: 2001-04-03
; PRIOR APPLICATION NUMBER: US 60/237,159
; PRIOR FILING DATE: 2000-10-02
; PRIOR APPLICATION NUMBER: GB 0008049.9
; PRIOR FILING DATE: 2000-04-03
; NUMBER OF SEQ ID NOS: 102
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 55
; LENGTH: 741
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Humanised HMFG1 heavy chain - DNase I fusion
US-09-825-012-55

Query Match 100.0%; Score 1263; DB 9; Length 741;
Best Local Similarity 100.0%; Pred. No. 4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCCPPCAPPELLGGPSVFLPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 236 EPKSCDKTHTCCPPCAPPELLGGPSVFLPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 295
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
DB 296 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 355
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVNESGQPENNYKTP 180
DB 356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVNESGQPENNYKTP 415
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSNVMEALHNNHYTQKLSLSGPK 232
DB 416 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSNVMEALHNNHYTQKLSLSGPK 467

RESULT 166
US-09-313-942-7
; Sequence 7, Application US/09313942
; Publication No. US2002012962A1
; GENERAL INFORMATION:
; APPLICANT: REGENERON PHARMACEUTICALS, INC.
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
; FILE REFERENCE: REG 203-A
; CURRENT APPLICATION NUMBER: US/09/313,942
```

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; CURRENT FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 09/313,942
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 60/101,858
; PRIOR FILING DATE: 1998-09-25
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 859
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-313-942-7

Query Match 100.0%; Score 1263; DB 9; Length 859;
Best Local Similarity 100.0%; Pred. No. 4.8e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCCPPCAPPELLGGPSVFLPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 622 EPKSCDKTHTCCPPCAPPELLGGPSVFLPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 681
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
DB 682 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 741
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVNESGQPENNYKTP 180
DB 742 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVNESGQPENNYKTP 801
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSNVMEALHNNHYTQKLSLSGPK 232
DB 802 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSNVMEALHNNHYTQKLSLSGPK 853

RESULT 167
US-09-935-868-7
; Sequence 7, Application US/09935868
; Patent No. US2002016490A1
; GENERAL INFORMATION:
; APPLICANT: Regeneron Pharmaceuticals, Inc
; TITLE OF INVENTION: Receptor Based Antagonists, and Methods of Making and Using
; FILE REFERENCE: REG 203D
; CURRENT APPLICATION NUMBER: US/09/935,868
; CURRENT FILING DATE: 2002-04-11
; PRIOR APPLICATION NUMBER: PCT/US99/22045
; PRIOR FILING DATE: 1999-09-22
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7
; LENGTH: 859
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-935-868-7

Query Match 100.0%; Score 1263; DB 9; Length 859;
Best Local Similarity 100.0%; Pred. No. 4.8e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EPKSCDKTHTCCPPCAPPELLGGPSVFLPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 60
DB 622 EPKSCDKTHTCCPPCAPPELLGGPSVFLPPKPKDITLMISRTPEVTCVVVDVSHEDPEVKF 681
QY 61 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 120
DB 682 NWYVDGVEVHNATKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKT 741
QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVNESGQPENNYKTP 180
DB 742 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEVNESGQPENNYKTP 801
QY 181 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSNVMEALHNNHYTQKLSLSGPK 232
DB 802 PVLDSGSPFLYSKLTVDKSRWQQGNVFCVSNVMEALHNNHYTQKLSLSGPK 853
```

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RESULT 168
US-10-287-035-7
; Sequence 7, Application US/10287035
; Publication No. US20030104567A1
; GENERAL INFORMATION:
; APPLICANT: Neil Stahl and George D. Yancopoulos
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
; TITLE OF INVENTION: AND USING
; FILE REFERENCE: REG 203DA
; CURRENT APPLICATION NUMBER: US/10/287,035
; CURRENT FILING DATE: 2002-11-01
; PRIOR APPLICATION NUMBER: USSN 09/935,868
; PRIOR FILING DATE: 2001-08-23
; PRIOR APPLICATION NUMBER: USSN 09/787,835
; PRIOR FILING DATE: 2001-03-22
; PRIOR APPLICATION NUMBER: USSN 09/313,942
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 09/313,942
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 60/101,858
; PRIOR FILING DATE: 1998-09-25
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 859
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-287-035-7

Query Match      100.0%; Score 1263; DB 14; Length 859;
Best Local Similarity 100.0%; Pred. No. 4.8e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKPDKTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB      622 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKPDKTLMISRTPEVTCVVVDVSHEDPEVKF 681

QY      61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB      682 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 741

QY      121 ISKAKGQPREPOVYITLPFSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB      742 ISKAKGQPREPOVYITLPFSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 801

QY      181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232
DB      802 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 853

RESULT 170
US-09-313-942-9
; Sequence 9, Application US/09313942
; Publication No. US20020012962A1
; GENERAL INFORMATION:
; APPLICANT: REGENERON PHARMACEUTICALS, INC.
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
; TITLE OF INVENTION: AND USING
; FILE REFERENCE: REG 203-A
; CURRENT APPLICATION NUMBER: US/09/313,942
; CURRENT FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 09/313,942
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 60/101,858
; PRIOR FILING DATE: 1998-09-25
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 951
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-313-942-9

Query Match      100.0%; Score 1263; DB 9; Length 951;
Best Local Similarity 100.0%; Pred. No. 5.4e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKPDKTLMISRTPEVTCVVVDVSHEDPEVKF 60
DB      720 EPKSCDKTHTCPPCPAPELLGSPVFLPPPKPDKTLMISRTPEVTCVVVDVSHEDPEVKF 779

QY      61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
DB      780 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 839

QY      121 ISKAKGQPREPOVYITLPFSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180
DB      840 ISKAKGQPREPOVYITLPFSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 899

QY      181 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 232
DB      900 PVLDSGSGFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNNHYTKQSLSPGK 951

RESULT 171
US-09-935-868-9
; Sequence 9, Application US/09935868
; Patent No. US20020184690A1
; GENERAL INFORMATION:
; APPLICANT: Regeneron Pharmaceuticals, Inc

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;; TITLE OF INVENTION: Receptor Based Antagonists, and Methods of Making and Using  
;; FILE REFERENCE: REG 203D  
;; CURRENT APPLICATION NUMBER: US/09/935,868  
;; CURRENT FILING DATE: 2002-04-11  
;; PRIOR APPLICATION NUMBER: PCT/US99/22045  
;; PRIOR FILING DATE: 1999-09-22  
;; NUMBER OF SEQ ID NOS: 52  
;; SOFTWARE: PatentIn version 3.0  
;; SEQ ID NO 9  
;; LENGTH: 951  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
US-09-935-868-9

Query Match 100.0%; Score 1263; DB 9; Length 951;  
Best Local Similarity 100.0%; Pred. No. 5.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 720 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 779  
Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 780 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 839  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 840 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 899  
Qy 181 PVLDSGDSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 232  
Db 900 PVLDSGDSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 951

RESULT 172  
US-10-287-035-9  
;; Sequence 9, Application US/10287035  
;; Publication No. US20030104567A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Neil Stahl and George D. Yancopoulos  
;; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING  
;; TITLE OF INVENTION: AND USING  
;; FILE REFERENCE: REG 203DA  
;; CURRENT APPLICATION NUMBER: US/10/287,035  
;; CURRENT FILING DATE: 2002-11-01  
;; PRIOR APPLICATION NUMBER: USSN 09/935,868  
;; PRIOR FILING DATE: 2001-08-23  
;; PRIOR APPLICATION NUMBER: USSN 09/787,835  
;; PRIOR FILING DATE: 2001-03-22  
;; PRIOR APPLICATION NUMBER: USSN 09/313,942  
;; PRIOR FILING DATE: 1999-05-19  
;; PRIOR APPLICATION NUMBER: 09/313,942  
;; PRIOR FILING DATE: 1999-05-19  
;; PRIOR APPLICATION NUMBER: 60/101,858  
;; PRIOR FILING DATE: 1998-09-25  
;; NUMBER OF SEQ ID NOS: 60  
;; SOFTWARE: FastSeq for Windows Version 3.0  
;; SEQ ID NO 9  
;; LENGTH: 951  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
US-10-287-035-9

Query Match 100.0%; Score 1263; DB 14; Length 951;  
Best Local Similarity 100.0%; Pred. No. 5.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 720 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 779  
Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Db 780 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 839  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 840 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 899  
Qy 181 PVLDSGDSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 232  
Db 900 PVLDSGDSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 951

RESULT 173  
US-10-282-162-9  
;; Sequence 9, Application US/10282162  
;; Publication No. US20030143697A1  
;; GENERAL INFORMATION:  
;; APPLICANT: REGENERON PHARMACEUTICALS, INC.  
;; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING  
;; TITLE OF INVENTION: AND USING  
;; FILE REFERENCE: REG 203-B-US  
;; CURRENT APPLICATION NUMBER: US/10/282,162  
;; CURRENT FILING DATE: 2002-10-28  
;; PRIOR APPLICATION NUMBER: 09/787,835  
;; PRIOR FILING DATE: 1999-09-22  
;; PRIOR APPLICATION NUMBER: PCT/US99/22045  
;; PRIOR FILING DATE: 1999-09-22  
;; NUMBER OF SEQ ID NOS: 56  
;; SOFTWARE: FastSeq for Windows Version 3.0  
;; SEQ ID NO 9  
;; LENGTH: 951  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
US-10-282-162-9

Query Match 100.0%; Score 1263; DB 14; Length 951;  
Best Local Similarity 100.0%; Pred. No. 5.4e-92;  
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60  
Db 720 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 779  
Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
Db 780 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 839  
Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 180  
Db 840 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP 899  
Qy 181 PVLDSGDSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 232  
Db 900 PVLDSGDSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNYHTQKSLSLSPGK 951

RESULT 174  
US-10-418-836-38  
;; Sequence 38, Application US/10418836  
;; Publication No. US20040018573A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Power, Scott D.  
;; APPLICANT: Wang, Huaming  
;; APPLICANT: Ward, Michael  
;; TITLE OF INVENTION: Production of Functional Antibodies in  
;; TITLE OF INVENTION: Filamentous Fungi  
;; FILE REFERENCE: GC741-2  
;; CURRENT APPLICATION NUMBER: US/10/418,836  
;; CURRENT FILING DATE: 2003-04-17  
;; PRIOR APPLICATION NUMBER: US 60/373,889  
;; PRIOR FILING DATE: 2002-04-18  
;; PRIOR APPLICATION NUMBER: US 60/411,540  
;; PRIOR FILING DATE: 2002-09-18

; PRIOR APPLICATION NUMBER: US 60/452,134  
 ; PRIOR FILING DATE: 2003-03-04  
 ; PRIOR APPLICATION NUMBER: US 60/411,537  
 ; PRIOR FILING DATE: 2002-09-18  
 ; NUMBER OF SEQ ID NOS: 40  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 38  
 ; LENGTH: 972  
 ; TYPE: PRT  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: fusion protein  
 US-10-418-836-38

Query Match 100.0%; Score 1263; DB 15; Length 972;  
 Best Local Similarity 100.0%; Pred. No. 5.5e-92;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 741 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 800  
 QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 801 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 860  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTP 180  
 DB 861 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTP 920  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
 DB 921 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 972

RESULT 175

US-10-418-836-39  
 ; Sequence 39, Application US/10418836  
 ; Publication No. US20040018573A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Power, Scott D.  
 ; APPLICANT: Wang, Huaming  
 ; APPLICANT: Ward, Michael  
 ; TITLE OF INVENTION: Production of Functional Antibodies in  
 ; TITLE OF INVENTION: Filamentous Fungi  
 ; FILE REFERENCE: GC741-2  
 ; CURRENT APPLICATION NUMBER: US/10/418,836  
 ; CURRENT FILING DATE: 2003-04-17  
 ; PRIOR APPLICATION NUMBER: US 60/373,889  
 ; PRIOR FILING DATE: 2002-04-18  
 ; PRIOR APPLICATION NUMBER: US 60/411,540  
 ; PRIOR FILING DATE: 2002-09-18  
 ; PRIOR APPLICATION NUMBER: US 60/452,134  
 ; PRIOR FILING DATE: 2003-03-04  
 ; PRIOR APPLICATION NUMBER: US 60/411,537  
 ; PRIOR FILING DATE: 2002-09-18  
 ; NUMBER OF SEQ ID NOS: 40  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 39  
 ; LENGTH: 975  
 ; TYPE: PRT  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: fusion protein  
 US-10-418-836-39

Query Match 100.0%; Score 1263; DB 15; Length 975;  
 Best Local Similarity 100.0%; Pred. No. 5.5e-92;  
 Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 60  
 DB 744 EPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF 803

QY 61 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120  
 DB 804 NWYVDGVEVHNAKTPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 863  
 QY 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTP 180  
 DB 864 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTP 923  
 QY 181 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 232  
 DB 924 PVLDSGSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNNHYTKSLSLSPGK 975

Search completed: February 10, 2005, 06:42:56  
 Job time : 59 secs